

## 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\*

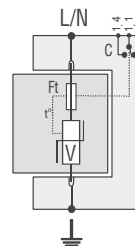
# 1250 Series General Duty AC Surge Protective Device

## 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,<br>120/208 V                     | 220/380 V,<br>240/415 V | 220/380 V,<br>277/480 V,<br>347/600 V | 347/600 V,<br>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                   | 400 V                                 | 550 V               |
| TOV Withstand  | 150 V                                       | 275 V                   | 400 V                                 | 550 V               |
| Leakage Current at Uc  | < 1 mA                                      |                         |                                       |                     |
| Follow Current   | None  |                         |                                       |                     |
| UL Nominal Discharge Current (In)<br>15 Impulses 8/20 $\mu$ s          | 20 kA                                       |                         |                                       |                     |
| Max. Discharge Current (I <sub>max</sub> )<br>1 Impulse 8/20 $\mu$ s   | 50 kA                                       |                         |                                       |                     |
| Max. Lightning Current (I <sub>imp</sub> )<br>1 Impulse 10/350 $\mu$ s | --  |                         |                                       |                     |
| 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 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
 Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.  
 Users should verify actual device performance in their specific applications.

# Applications

- Electrical service entrance
- Branch panels

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

### Product Dimensions and Schematics

#### 1250-1S-xxx

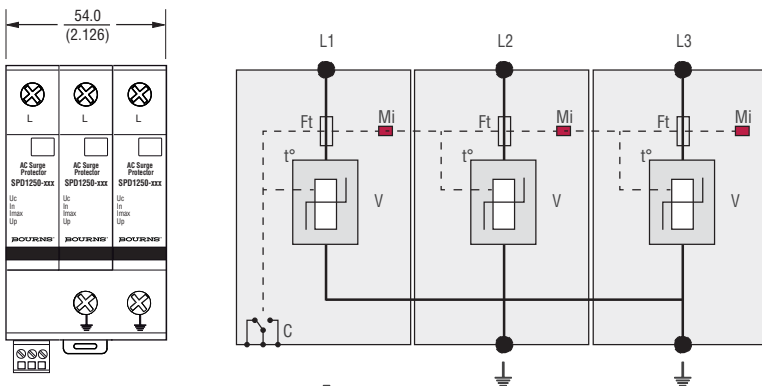


#### 1250-2S-xxx



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

#### 1250-3S-xxx

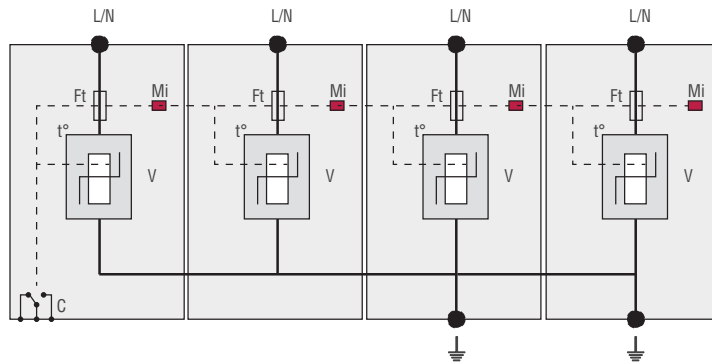


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# 1250 Series General Duty AC Surge Protective Device **BOURNS®**

## 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. 05/13

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Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

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- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
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- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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