

## Features

- 100 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, IEC
- RoHS compliant\*

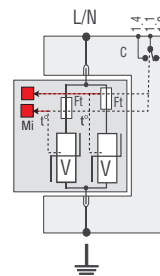
# 1210 Series Heavy Duty AC Surge Protective Device

## General Information

The Bourns® Model 1210 Series is a heavy 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 1210 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 600 V.

## Electrical Diagram



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

## Electrical Characteristics

Characteristic	Model No.			
	1210-xS-120	1210-xS-230	1210-xS-400	1210-xS-600
AC Network	120/240 V, 120/208 V	220/380 V, 240/415 V	220/380 V, 277/480 V, 347/600 V	480 V, 600 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	840 V
TOV Withstand	230 V	440 V	770 V	1117 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 <sub>max</sub> ) 1 Impulse 8/20 µs	100 kA			
UL Voltage Protection Rating (VPR)	600 V	900 V	1200 V	3000 V
Protection Level (Up)	0.9 kV	1.25 kV	1.8 kV	4.0 kV
UL Short-Circuit Current Rating (SCCR)	100kAIC			

## General Characteristics

Characteristic	Model No.			
	1210-xS-120	1210-xS-230	1210-xS-400	1210-xS-600
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 V Max., 2 A			
Enclosure Material	Thermoplastic UL 94V0			

## Environmental Characteristics

Characteristic	Model No.			
	1210-xS-120	1210-xS-230	1210-xS-400	1210-xS-600
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

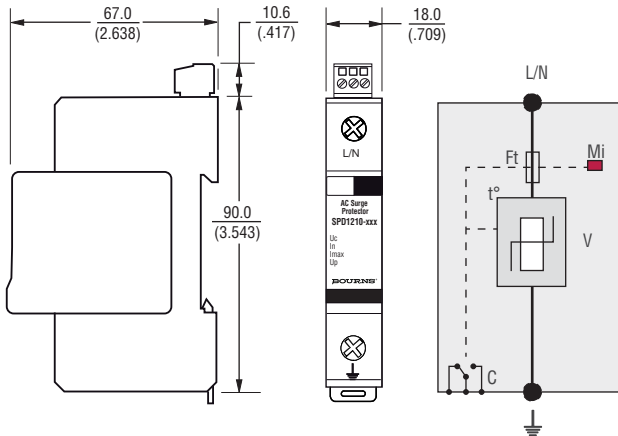
- Electrical service entrance
- Branch panels

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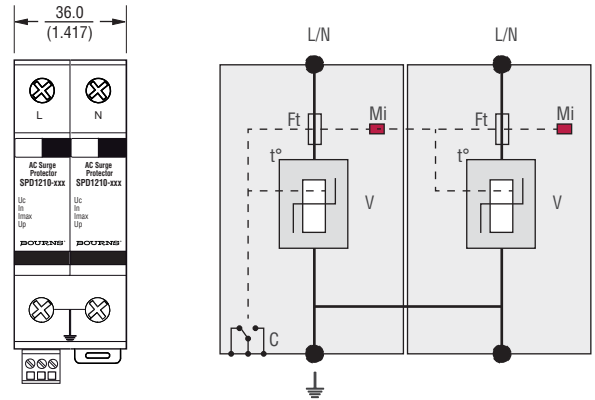
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### Product Dimensions and Schematics

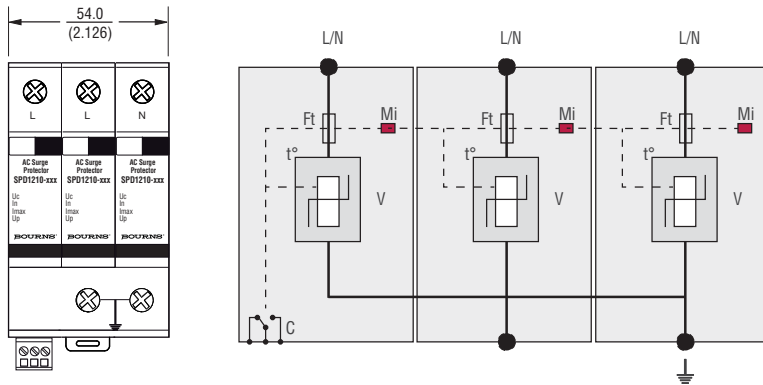
1210-1S-120, 1210-1S-230, 1210-1S-400



1210-2S-120, 1210-2S-230, 1210-2S-420

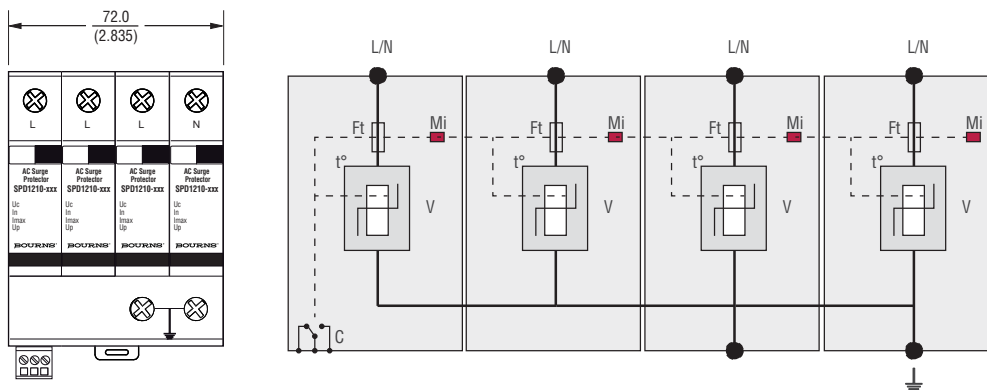


1210-3S-120, 1210-3S-230, 1210-3S-400



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

1210-4S-120, 1210-4S-230, 1210-4S-400



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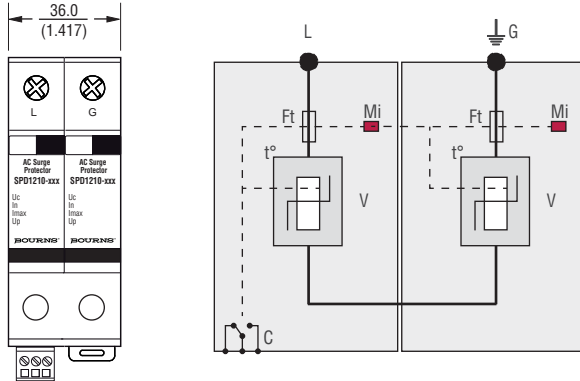
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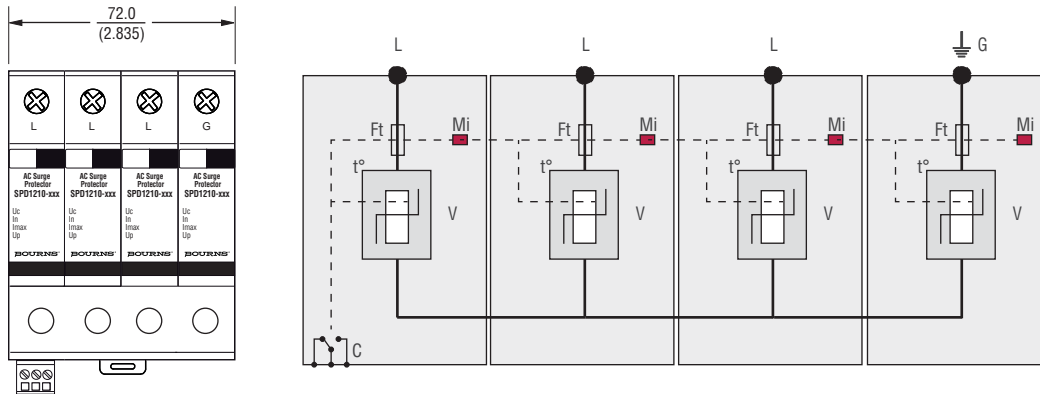
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## Product Dimensions and Schematics (Continued)

1210-1S-600



1210-3S-600



### 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

**1210 - x S - xxx**

Series \_\_\_\_\_  
 Configuration \_\_\_\_\_  
     1 = One Protected Pole  
     2 = Two Protected Poles  
     3 = Three Protected Poles  
     4 = Four Protected Poles  
 Remote Signalling Code \_\_\_\_\_  
     S = Remote Signalling  
 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  
     \*600 = 480 V, 600 V

\* Refer to the mechanical differences shown above when ordering Models 1210-1S-600 and 1210-3S-600.

REV. 10/19

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