

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 compliant*

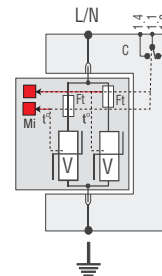
1210 Series Heavy Duty AC Surge Protective Device

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 U _c	< 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	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 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

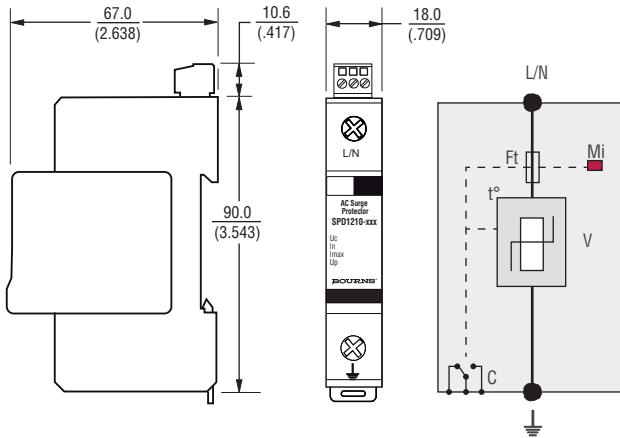
- Electrical service entrance
- Branch panels

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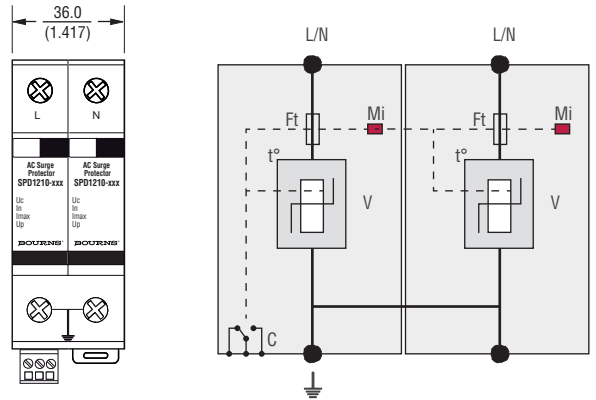
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Product Dimensions and Schematics

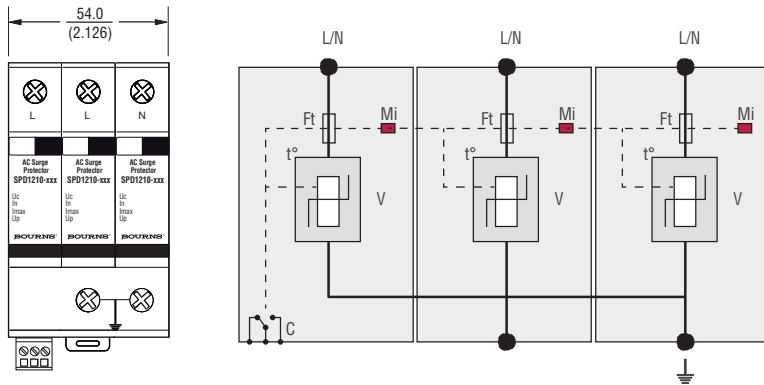
1210-1S-120, 1210-1S-230, 1210-1S-400



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

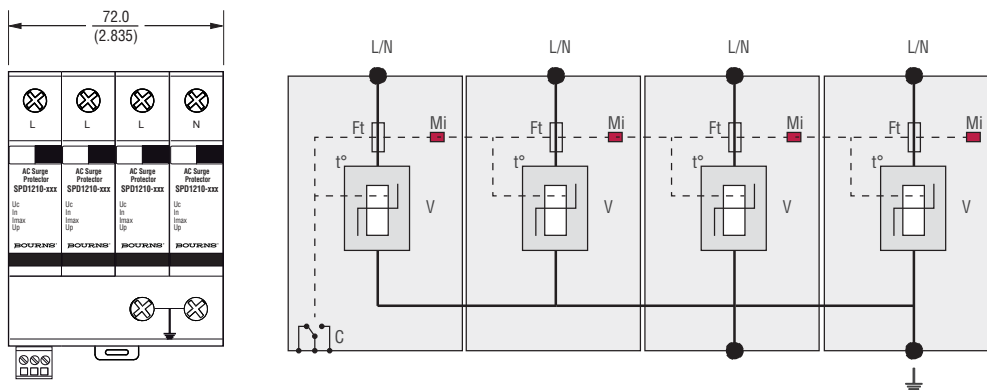


1210-3S-120, 1210-3S-230, 1210-3S-400



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

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



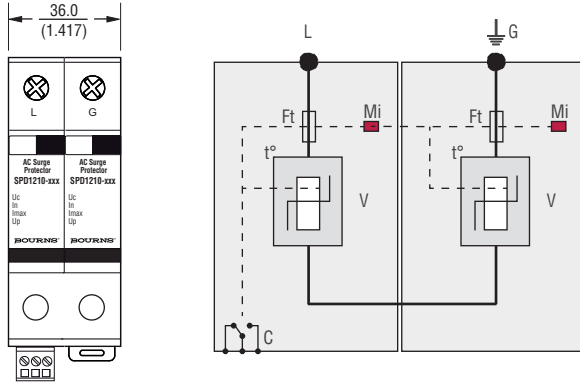
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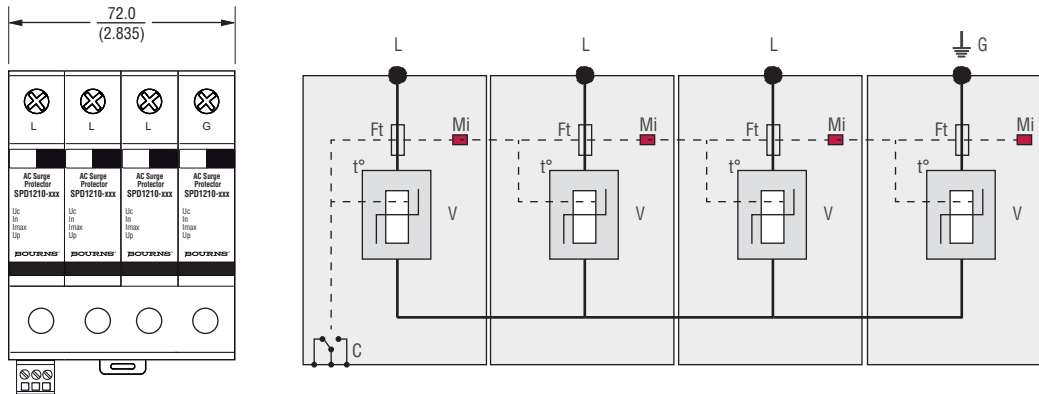
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Product Dimensions and Schematics (Continued)

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

REV. 09/16

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

Mouser Electronics

Authorized Distributor

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Bourns:

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[1210-2S-120](#) [1210-3S-400](#) [1210-1S-230](#) [1210-4S-400](#) [1210-3S-230](#) [1210-1S-400](#)