



## Features

- Hybrid protection technology
  - Extremely low leakage current
  - Heavy duty surge protection
  - LED indicators and audible alarm
  - Compact form factor
  - Indoor or outdoor installation
- UL1449 4th Edition
  - RoHS compliant\*

## 1251 Series Hardwired AC Hybrid Surge Protective Device (H-SPD)

### General Information

The Bourns® Model 1251 Series is a Type 1 hardwired hybrid surge protective device targeted for AC infrastructure applications. The hybrid Model 1251 design combines fast responding MOV technology with low leakage GDT technology resulting in reliable and long term performance.

### Electrical Characteristics

Characteristic		Model No.		
		1251-120S	1251-208Y	1251-240S
Electrical Distribution System		120 VAC Single Ph	120 / 208 VAC 3 Ph Wye	120 / 240 VAC Single Ph
Nominal (Operating) Voltage		120 VAC	120 / 208 VAC	120 / 240 VAC
Maximum Operating Voltage	MCOV	150 VAC		
Temporary Overvoltage Withstand	$U_T$	150 VAC		
Nominal Discharge Current in 15 Applications of 8/20 $\mu$ s Impulse Waveform	$I_n$	20 kA		
Maximum Discharge Current 8/20 $\mu$ s Withstand Single Operation	$I_{max}$	50 kA		
Overvoltage Protection Rating (3 kA)	$V_{pr}$	700 VAC		
Protection Level at $I_n$	$U_p-I_n$	1200 VAC		
Short Circuit Current Rating	$I_{scrr}$	100 kA		

### Disconnection Features / Options

Thermal Disconnect..... Internal  
 Fuses or Circuit Breakers ..... 40 A  
 Ground Fault Breaker (if Installed) ..... Type S or Delay

### Mechanical Characteristics

Enclosure..... Aluminum  
 Environmental Rating ..... IP 66 / NEMA 4x  
 Operating Temperature..... -40 °C to +85 °C  
 Mounting..... Bulkhead (3/4)  
 Weight ..... 2.5 lbs.  
 Disconnection Indicator ..... LED off and audible alarm on  
 Electrical Connection..... 12 AWG wiring leads, 20 inches max. length  
 Mechanical Connection to Panel..... 12 gauge, straight nipple with conduit nut  
 for mounting through 0.5 inch knockout  
 (actual hole size 0.875 inch)

### Standards Compliance

UL1449 4th Edition, Type 1 ..... E313168  
 CEI 61643-1, International..... Low Voltage SPD - Test Class II  
 EN 61643-11, Europe ..... Low Voltage SPD - Test Class II

### How To Order

**1251 - xxxx - xx**

Series \_\_\_\_\_  
 Nominal (Operating) Voltage \_\_\_\_\_  
 120S = 120 VAC  
 208Y = 120/208 VAC  
 240S = 120/240 VAC  
 Configuration \_\_\_\_\_  
 N1= Wiring/Nipple Right Side Exit  
 N2 =Wiring/Nipple Rear Exit

### Packaging Specifications

1251 Series ..... one unit per box

\*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

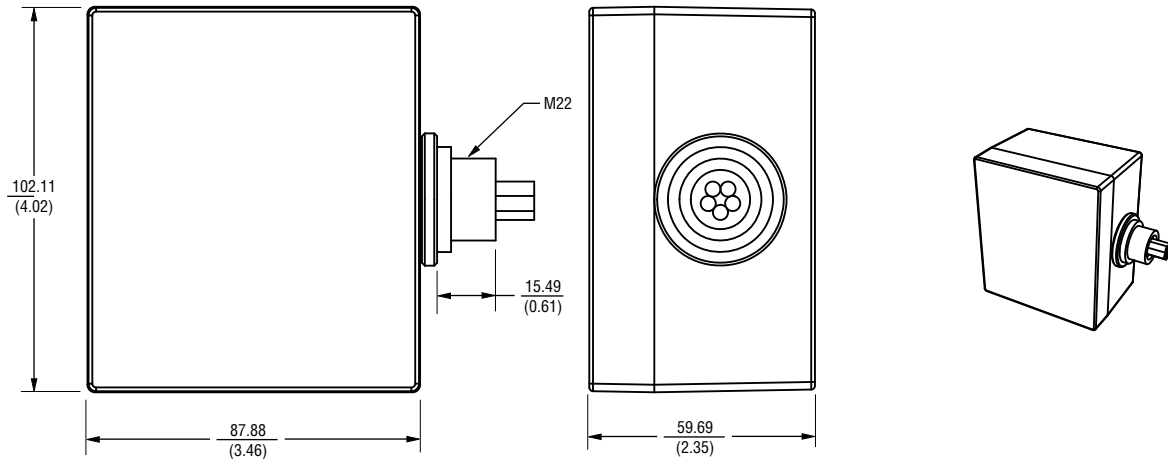
- Service entrance, branch and OEM panels
- Electrical infrastructures
- Equipment and systems
- Protection from lightning
- Protection from AC power-induced problems

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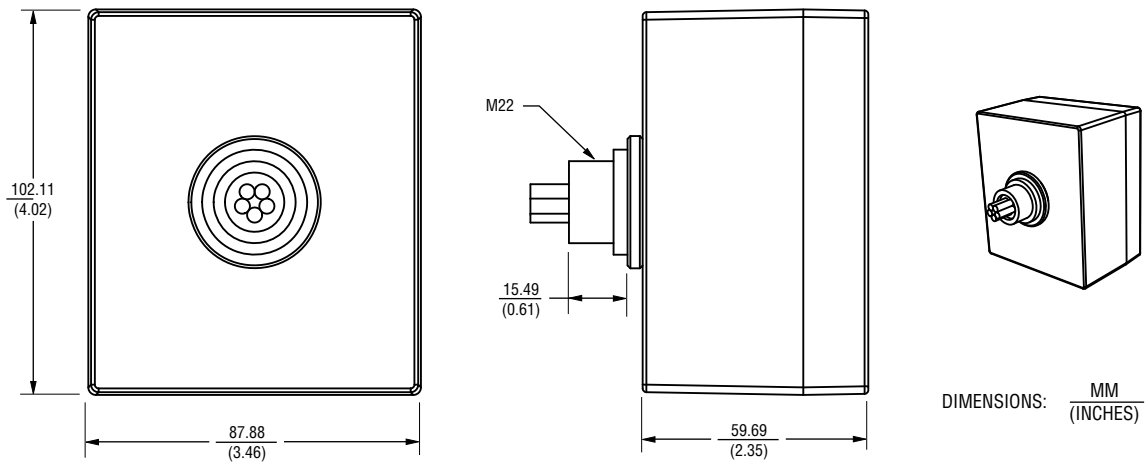
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### Product Dimensions

#### N1 Configuration



#### N2 Configuration



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

**BOURNS®**

Asia-Pacific: Tel: +886-2 2562-4117 • Email: [asiacus@bourns.com](mailto:asiacus@bourns.com)

EMEA: Tel: +36 88 885 877 • Email: [eurocus@bourns.com](mailto:eurocus@bourns.com)

The Americas: Tel: +1-951 781-5500 • Email: [americus@bourns.com](mailto:americus@bourns.com)

[www.bourns.com](http://www.bourns.com)

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