

#### **Features**

- Complies with UL 1449 and IEC/EN 61643-11 standards
- UL recognized Type 4, Type 2 location SPD, passed short circuit current rating (SCCR) 200 kA without external fuse or CB
- High reliability protected MOV with Advanced Thermal Disconnector (TD+)
- Large surge energy capability up to 50 kA per mode
- Pluggable module for easy replacement

## 1250A Series General Duty AC Surge Protective Device

#### **General Information**

The Bourns® Model 1250A 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 1250A Series can be configured for both common mode and differential mode protection, in single and three phase applications.

#### **Additional Information**

Click these links for more information:









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#### **Electrical Characteristics**

Characteristic		Model No.					
		1250A-xS- 120	1250A-xS- 230	1250A-xS- 277	1250A-xS- 400	1250A-xS- 480	1250A-xS- 600
AC Network		120 / 240 V 120 / 208 V	220 / 380 V 230 / 400 V	240 / 415 V 277 / 480 V	277 / 480 V 347 / 600 V	347 / 600 V 480 V (Delta)	600 V (Delta)
Compliance		UL1449; EN/IEC 61643-11					
Category UL/EN/IEC		Type 4,Type 2 location / T2 / Class II					
Product Technologies		High energy MOV Technology Advanced Thermal Disconnector (TD+)					
Connection Mode		1-Pole, L-N or L-G or N-PE					
AC System		IT, TT, TN, Single, Split Phase, Delta, Wye					
Max. Operating Voltage (MCOV)		150 V	275 V	320 V	420 V	550 V	690 V
Leakage Current at Uc		< 1 mA					
Follow Current		None					
	Nominal Discharge Current 8/20 μs (In)	20 kA					
UL 1449	Max. Discharge Current (Imax) 1 Impulse 8/20 μs	50 kA 4					40 kA
OL 1449	Voltage Protection Rating (VPR)	≤ 0.7 kV	≤ 1.0 kV	≤ 1.2 kV	≤ 1.5 kV	≤ 1.8 kV	≤ 2.5 kV
	Short–Circuit Current Rating (SCCR)	200 kA <sub>rms</sub>					
EN/IEC 61643-11	Nominal Discharge Current 8/20 µs (In)	20 kA			n/a		
	Max. Discharge Current (Imax) 1 Impulse 8/20 μs	40 kA			n/a		
	Protection Level (Up)	≤ 0.8 kV	≤ 1.4 kV	≤ 1.5 kV	n/a		
	Short–Circuit Current Rating (SC)	10 kA <sub>rms</sub>		n/a			

### **Applications**

- Electrical service entrance
- Branch panels
- All power circuits
- Heavy industrial
- EV charging stations

# 1250A Series General Duty AC Surge Protective Device

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#### **General Characteristics**

Characteristic	Model No.						
Characteristic	1250A-xS-120	1250A-xS-230	1250A-xS-277	1250A-xS-400	1250A-xS-480	1250A-xS-600	
Thermal Disconnector	UL 60691						
Overcurrent Protection	Time Delay - 125 A Max.						
Connection	By Screw Terminal: Single-strand #2 AWG or 35 mm²; multi-strand #4 AWG or 25 mm²			25 mm <sup>2</sup>			
Dimensions	See Product Dimensions						
Mounting	DIN Rail, 35 mm Symmetrical						
Remote Signal Indicator	250 VAC Max., 0.5 A						
Enclosure Material	Thermoplastic UL 94V0						

#### **Environmental Characteristics**

Characteristic	Model No.						
Characteristic	1250A-xS-120	1250A-xS-230	1250A-xS-277	1250A-xS-400	1250A-xS-480	1250A-xS-600	
Operating Temperature	-40 °C to +85 °C						
Operating Altitude	≤ 2000 m						
Relative Humidity	5 to 95 % Non-condensing						
Environmental Rating	IP 20						

#### **Standards Compliance**

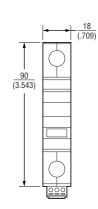
IEC/EN 61643-1	l1	Class II , Type 2
UL1449		Type 4, Type 2 location
CSA C22.2		Type 4, Type 2 location
IEEE C62.41		
RoHS	BoHS Directive 2015/863	Mar 31 2015 and Annex

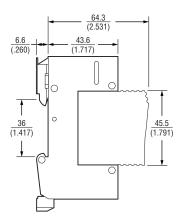
#### **How to Order** 1250A - x S - xxx Model Designator -1250A = Advanced Version of 1250 Series Configuration (number of poles) -1 = One Protected Pole 2 = Two Protected Poles 3 = Three Protected Poles 4 = Four Protected Poles Remote Signaling Code -S = Remote Signaling Operating Voltage 120 = 120/240 V, 120/208 V 230 = 220/380 V, 230/400 V 277 = 240/415 V, 277/480 V 400 = 277/480 V, 347/600 V 480 = 347/600 V, 480 V (Delta)

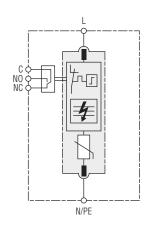
600 = 600 V (Delta)

### **Product Dimensions and Schematics**

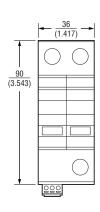
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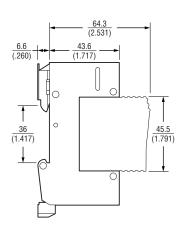


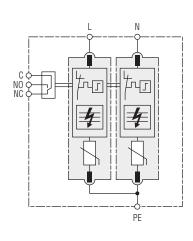




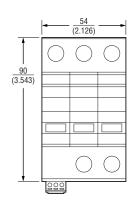
2P

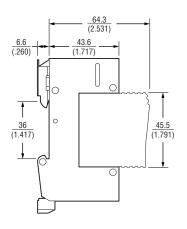


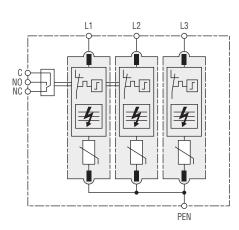




3P





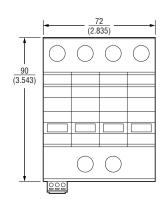


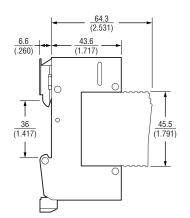
# 1250A Series General Duty AC Surge Protective Device

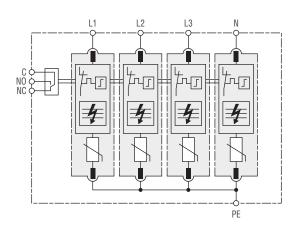
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#### **Product Dimensions and Schematics**

4P







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