

NEW PRODUCT BRIEF

Bourns® Model 1202 Hybrid Surge Protective Device



INTRODUCTION

To protect a wide variety of AC infrastructure applications against lightning surges, Bourns offers its [Model 1202 Surge Protective Device](#) (SPD). The 1202 SPD combines the Company's fast-responding Metal Oxide Varistor (MOV) technology with its low leakage Gas Discharge Tube (GDT) technology to deliver a device that provides consistent, long-life, reliable and enhanced protection performance.

The innovative hybrid design of the 1202 SPD uses the GDT to isolate the MOV from the line voltage, thus shielding it from transients and temporary overvoltage spikes that can potentially damage the MOV over time. The GDT's ultra-low leakage also helps to reduce damage due to watt loss heating.

The device series has a nominal current rating of 10 kA and a short circuit current rating of 25 kA. The device's LED indicators provide visual indication when the surge protector encounters any situation that requires its internal safety fusing to activate. In addition, the series is IP66/ NEMA 4x rated and can be used indoors or outdoors.

The Bourns® Model 1202 Series is available in two versions: a 120 V_{rms} version as well as a 120/240 split phase version. The Model 1202-240S is capable of covering six (6) modes of protection on a 120/240 split installation, and is designed to offer comprehensive protection of symmetric modes.

APPLICATION OVERVIEW

The Bourns® Model 1202 is a UL Type 1 SPD. As a Type 1 SPD that is permanently connected and hardwired, the Bourns® Model 1202 can be installed between the secondary side of the utility service transformer and the line side of the service equipment overcurrent protective device, as well as the load side of the main service equipment. The extensive features designed into Bourns' latest hybrid SPD make it an optimal solution to protect against lightning threats (up to rated limits) and for AC power-induced problems in a broad range of applications.

APPLICATIONS

- Service entrance, branch and OEM panels
- Electrical infrastructures
- Equipment and system cabinets
- Energy generation and distribution
 - Power supplies, smart meters
 - PV inverters, EV chargers
- Exposed electronics equipment
 - Cameras, traffic control equipment, weather stations
- High-efficiency lighting and displays
 - LED lighting in commercial signage, municipal lighting
- Communications
 - Cabinet, 5G infrastructure

FEATURES

- Two versions available:
 - 120 V_{rms} single phase systems
 - 120/240 V_{rms} split phase systems
- Multi-mode protection (L-L, L-N, N-G)
 - 6 Modes of protection
- In-10 kA/Issc-25 kA rated
- LED indicator status lights
- IP66/Nema 4x environment rating
- UL 1449, 4th edition; CSA 22.2 #269
- Temperature range: -40 °C to +85 °C

BENEFITS

- Low leakage
- Hybrid design – GDT isolates MOV from line voltage
- Extends product life, increases reliability
- Rated for indoor or outdoor use*
- Type 1 SPD requires no series fusing
- Compact form factor
- RoHS compliant**

HOW TO ORDER

Series 1202 - xxxx
 Nominal (Operating) Voltage _____
 120S = 120 V_{AC}
 240S = 120/240 V_{AC}

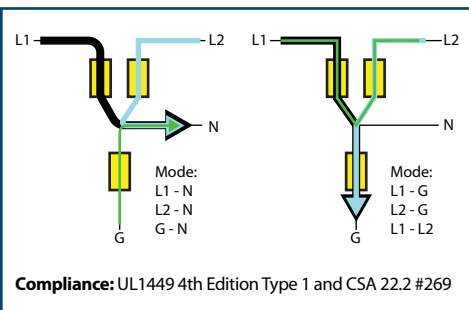
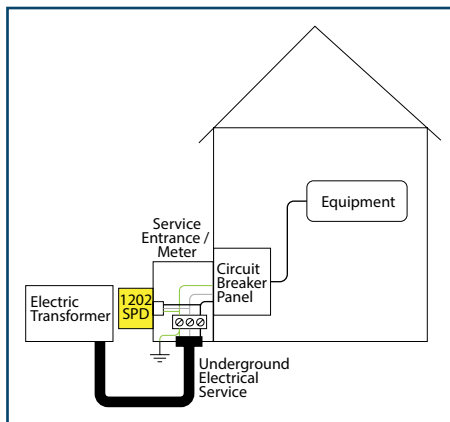
PACKAGING SPECIFICATIONS

1202 Seriesone unit per box

MORE INFORMATION

- [AC power SPDs](#)
- [DC power SPDs](#)
- [Signal and data line SPDs](#)
- [Coaxial SPDs and enclosures](#)
- [Bourns SPD brochure](#)
- [Bourns Information & Communication Technology \(ICT\) Brochure](#)

*To maintain the NEMA 4x rating of the host enclosure, a gasket must be placed on the exterior side of the mounting conduit fitting.
 **RoHS Directive 2015/863, Mar 31, 2015 and Annex.



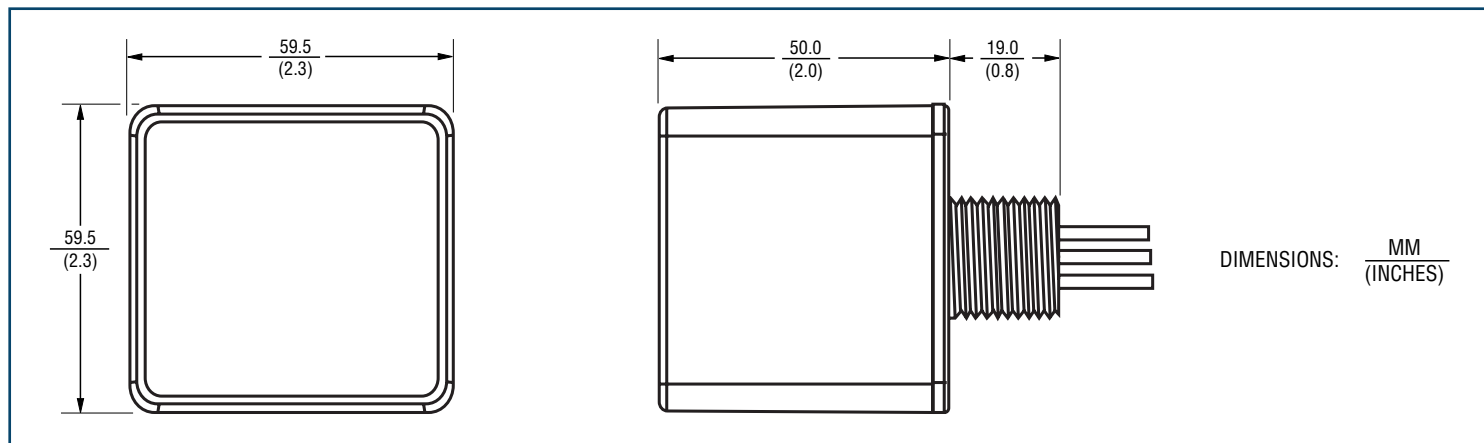
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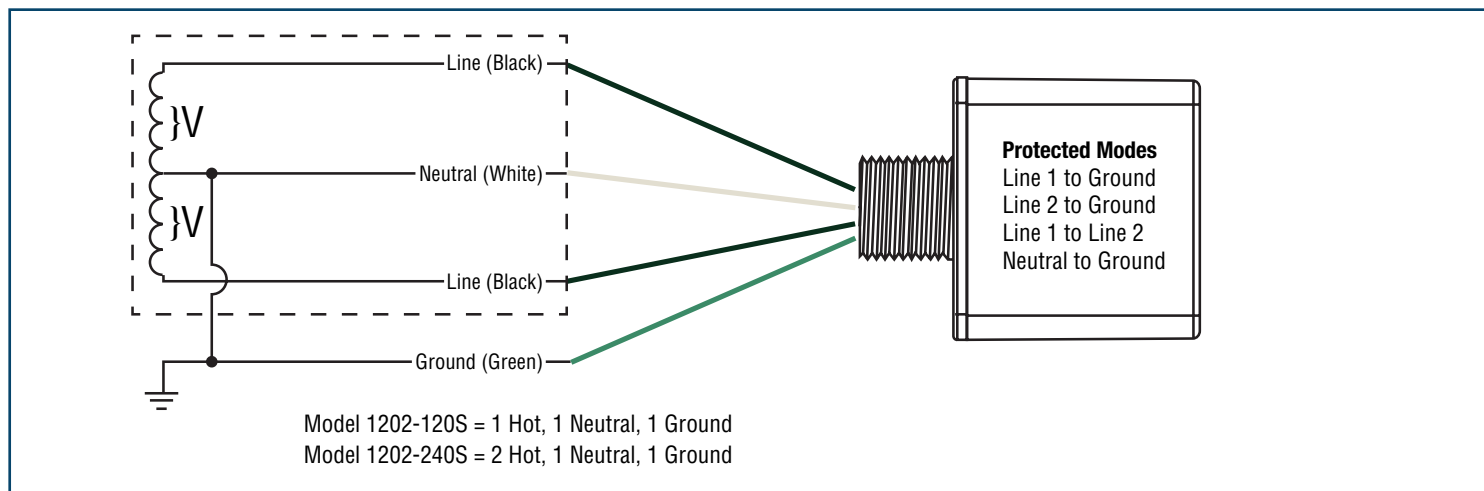
ELECTRICAL CHARACTERISTICS

Characteristic	Model No.	
	1202-120S	1202-240S
Electrical Distribution System (Phase)	120 V _{AC} Single	120 / 240 V _{AC} Single/Split
Nominal (Operating) Voltage	120 V _{AC}	120 / 240 V _{AC}
Maximum Operating Voltage	MCOV	150 V _{AC}
Temporary Overvoltage Withstand	U _T	150 V _{AC}
Nominal Discharge Current in 15 Applications of 8/20 μs Impulse Waveform	I _n	10 kA
Overvoltage Protection Rating (3 kA)	V _{pr}	1200 V _{AC}
Short Circuit Current Rating	I _{scrr}	25 kA @ 230 V _{AC}

PRODUCT DIMENSIONS



WIRING AND PROTECTION MODES



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