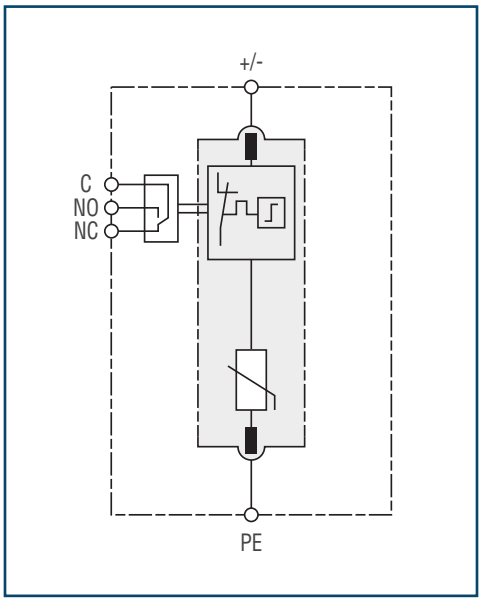
NEW PRODUCT BRIEF

Bourns® Model 1430 Series IEC Class I DC Surge Protective Devices

INTRODUCTION

The Bourns® Model 1430 Series is a family of DC power Surge Protective Device (SPD). This series is designed for photovoltaic system DC-side protection against damage from surges caused by lightning and other electrical sources, up to rated limits, while operating up to 1500 VDC. This new high-energy MOV technology design features a unique Thermal Disconnector that provides quick thermal response and secure disconnection to surge events.
These space-saving Din-Rail mountable devices have a maximum lightning surge current rating of 80 kA (8/20 µs) per pole. The series is RoHS compliant*, meets IEC/EN 61643-31 standards and is an ideal solution for designs that require Class I + Class II / T1+T2 SPDs.

CIRCUIT DIAGRAM



APPLICATIONS

- DC power applications
- Photovoltaic systems
- EV charging stations

MORE INFORMATION

- AC Power SPDs: Model 1270 Series SPD
- AC Power SPDs: Model 1280 Series SPD
- DC Power SPDs: Model 1440 Series SPD
- High-energy MOVs
- High-current GDTs
- Power TVS Diodes

FEATURES

- High-energy MOV technology with Thermal Disconnector (TD)
- Status indicator
- Replaceable modular design
- Ideal solution for common mode and differential mode protection
- Remote signaling capability
- IEC/EN 61643-31 compliant Class I + Class II / T1+T2 SPD
- With 80 kA I_{max} (8/20 µs) and 12.5 kA I_{imp} (10/350 µs) current capability

BENEFITS

Bourns® Model 1430 Series SPDs address the risk of thermal runaway due to sustained overvoltages and surges, which can lead to overheating and potential fire hazards. These devices incorporate a Thermal Disconnector for added safety by automatically disconnecting in extreme conditions. This series also features an enhanced window fault indicator and remote alarm for real-time monitoring that enables faster reaction times resulting in an additional safeguard that helps ensure the efficiency operation of electrical systems.

HOW TO ORDER

1430 - PV - xxxx - x

Model Designator
- 1430 = IEC Class I DC SPD

Application Code
- PV = Photovoltaic

Network Voltage

48 = 48 VDC	60 = 60 VDC
100 = 100 VDC	150 = 150 VDC
200 = 200 VDC	300 = 300 VDC
400 = 400 VDC	500 = 500 VDC
600 = 600 VDC	750 = 750 VDC
800 = 800 VDC	1000 = 1000 VDC
1200 = 1200 VDC	1500 = 1500 VDC

Configuration
- P = Single protection
- D = V configuration
- Y = Y configuration

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

NEW PRODUCT BRIEF

Bourns® Model 1430 Series IEC Class I DC Surge Protective Devices

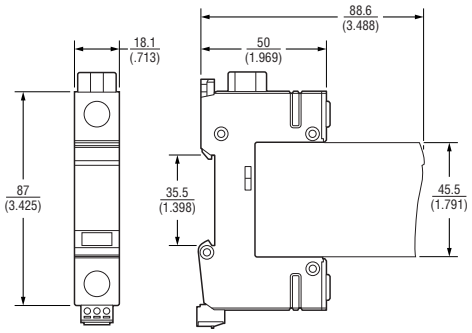
ELECTRICAL CHARACTERISTICS

Series	Product Technologies	Connection Mode	DC Network	Max. Operating Voltage (U_c)	IEC/EN Category	Compliance
1430-PV-48-x	High Energy MOV Technology Thermal Disconnector (TD)	1-Pole Single Protection 2-Pole V Configuration 2-Pole Y Configuration	48 VDC	85 VDC	Class I + Class II / T1 + T2	IEC/EN 61643-31
1430-PV-60-x			60 VDC	100 VDC		
1430-PV-100-x			100 VDC	125 VDC, 110 VDC (Y config.)		
1430-PV-150-x			150 VDC	170 VDC		
1430-PV-200-x			200 VDC	225 VDC, 250 VDC (Y config.)		
1430-PV-300-x			300 VDC	350 VDC, 340 VDC (Y config.)		
1430-PV-400-x			400 VDC	460 VDC, 450 VDC (Y config.)		
1430-PV-500-x			500 VDC	560 VDC		
1430-PV-600-x			600 VDC	670 VDC, 700 VDC (Y config.)		
1430-PV-750-x			750 VDC	800 VDC		
1430-PV-800-x			800 VDC	920 VDC		
1430-PV-1000-x			1000 VDC	1120 VDC		
1430-PV-1200-x			1200 VDC	1340 VDC		
1430-PV-1500-x			1500 VDC	1500 VDC		

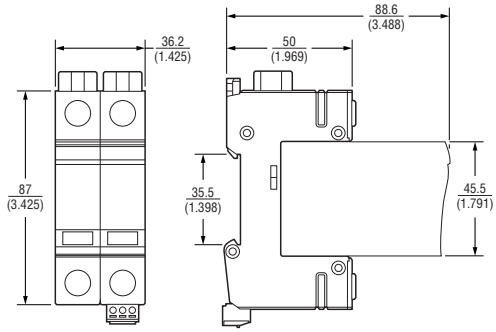
For full characteristics, see data sheet

PRODUCT DIMENSIONS

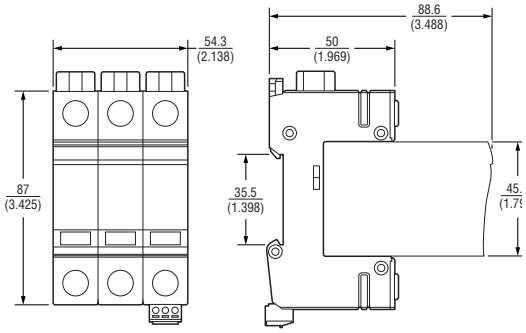
1P



2P



3P



DIMENSIONS: MM (INCHES)