

Dairyland Electrical Industries

Polarisation Cell Replacement

The PCR is a solid-state device designed to simultaneously provide DC decoupling and AC continuity/grounding when used with cathodically protected structures, such as pipelines, tanks, grounding systems, and cable casings. The PCR has very high AC fault current and lightning surge current ratings. With a higher blocking voltage than polarization cells, the PCR eliminates the need for placing devices in series, making it the most ideal isolation and grounding product for cathodically protected structures. In addition to out-performing polarization cells, the PCR also surpasses metal oxide varistors and gapped arresters, clamping lightning-caused over-voltages to the lowest possible levels.

Features and Characteristics

- Range of AC Fault Ratings
 - Higher Blocking Voltage than Polarization Cells
- UL and C-UL Listed for Grounding Electrical Equipment
 - UL, C-UL Listed for Class I, Division 2 Locations
- Certified by UL/Demko for Meeting ATEX Directive for Zone 2; CE Marked
 - Available in Submersible Version





Over Voltage Protection

Overview

Requests for a compact, explosion-proof protection device led to the design of the Over Voltage Protector (OVP). With the input of potential users and our existing base of clients, the OVP was designed and tested to meet the requirements for Class I, Division 1 & 2, Group B, C, D classified locations. Independent testing and product listing was performed by Underwriter's Laboratories (UL), authorizing the use of the UL and C-UL (Canada) marks. The device has also been tested and approved by UL/Demko for compliance to the ATEX directive for Zone 2 applications, and carries the CE mark for Zone 2.

The model OVP is primarily used in Class I, Division 1 hazardous locations, requiring explosion-proof construction. For Division 2 or ordinary locations, see also the model OVP-2.

The OVP is unlike other "arrester" type products. Instead of a gapped design, the OVP uses solid-state switching components to conduct at very low voltages, providing the best over-voltage protection. Rated for AC fault current as well as high values of lightning surge current, the OVP can be applied to sites where a spark-gap arrester or metal oxide varistor would be inappropriate. The OVP is a totally unique product for the corrosion prevention industry.

Note: the OVP is not recommended where steady-state AC voltage exists between the connection points, typically induced AC voltage

Features and Characteristics

- The only fail-safe "arrester" on the market (i.e. fails shorted)
 - Solid-state design eliminates arcing
- Conduction at much lower voltages than gapped arresters
 - Rated for AC fault current and lightning surge current
 - Suitable for submersed or above-ground locations
 - UL, C-UL listed explosion-proof design
 - Corrosion resistant nickel finish

