

Solid State PCR Polarization Cell Replacement 3.7 KA – 15 KA

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. By decoupling the cathodic protection system from grounding systems and other structures, the CP requirements can be minimized, while maintaining an effective ground or bond rated for AC faults and lightning current.

Features:

- Fail-safe design assures bonding/grounding
- Certified for hazardous locations, electrical grounding
- Higher blocking voltage than polarization cells
- Inherent over-voltage protection provided to structure
- No maintenance or testing required

Typical Applications:

- Insulated Joint Protection
- AC Voltage Mitigation
- Decoupling Electric Equipment Grounding Systems
- Decoupling From Utility Grounding Systems

Why Fault Current Is Important:

Fault current exposure for the product relates to the ampacity, proximity and mode of current transfer from a faulting source (power transmission line, motor circuit, induction from overhead lines, etc.). Select a product rating that has reasonable margin above the site conditions.

| AC Fault Current Ratings (Amps AC-RMS Symmetrical) | | |
|---|---------------------|--------|
| PCR Model | Rating at 30 Cycles | |
| | 60Hz | 50Hz |
| PCR-3.7KA | 3,700 | 3,700 |
| PCR-5KA | 5,000 | 5,000 |
| PCR-10KA | 10,000 | 9,000 |
| PCR-15KA | 15,000 | 14,000 |

Other Ratings and Certifications:

Threshold Voltage (absolute)

| | |
|-------------------|-------------------|
| -3/+1V (standard) | -4/+1V (optional) |
| -2/+2V (optional) | -6/+1V (optional) |

AC Steady-State Current (amperes - rms) 50/60Hz

| | |
|----------------|----------------|
| 45A (standard) | 80A (optional) |
|----------------|----------------|

Lightning Surge Current

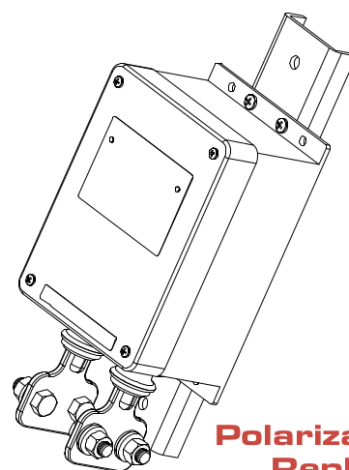
100kA crest (8 x 20 μ s waveform)

Environmental rating:

| | |
|-----------------------------------|------------------------------------|
| NEMA 4X: Rain-proof (Standard) | NEMA 6P: Submersible (Optional) |
|-----------------------------------|------------------------------------|

Hazardous Location Certifications:

| Rating | Certification Agency |
|--|----------------------|
| Class I, Division 2, Groups A, B, C, D Temp Code T4 | UL, C-UL |
| Class I, Zone 2, Group IIC, ATEX Directive, IECEX, Temp Code T4 | UL/DEMKO |



PCR
Polarization Cell
Replacement

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