



The SSD 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, and grounding systems. Using proven, solid-state construction, but with new production and packaging techniques, the SSD line lowers costs while offering a certified, fail-safe solution.

### Features:

- Compact, lightweight package
- 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
- Submersible design

### Typical Applications:

- Gradient Control Mat Decoupling
- Insulated Joint Protection
- AC Voltage Mitigation
- Decoupling Electric Equipment 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. Contact Dairyland for any assistance with selection of appropriate ratings.

| AC Fault Current Ratings<br>(Amps AC-RMS Symmetrical)   |                                |
|---|--------------------------------|
| SSD Model   | Rating at 30 Cycles<br>50/60Hz |
| SSD-2/2-1.2-75-R  | 1,200                          |
| SSD-2/2-2.0-100-R   | 2,000                          |
| SSD-2/2-3.7-100-R   | 3,700                          |
| SSD-2/2-5.0-100-R   | 5,000                          |
| Note: Standard SSD models shown. For other options available, please visit <a href="http://www.dairyland.com">www.dairyland.com</a> |                                |

### Other Ratings and Certifications:

*Threshold Voltage (absolute)*

-2/+2V (standard)

-3/+1V (optional)

*Lightning Surge Current*

1.2kA Models: 75kA crest (4 x 10 μs waveform)

All Other Models :100kA crest (4 x 10 μs waveform)

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

45A (Standard)

*Environmental rating:*

IP68 - submersible (to 2m depth)

*Hazardous Location Certifications:*

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

For model numbers, options and accessories, see full technical literature at [www.dairyland.com](http://www.dairyland.com)

