



## Solid-State Decoupler (SSD) Data Sheet

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 (Amps AC-RMS Symmetrical)

SSD Model	Rating at 30 Cycles 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 [dairyland.com](http://dairyland.com)

### Other Ratings and Certifications:

Threshold Voltage (absolute)  
-2/+2V (standard)      -3/+1V (optional)

### Lightning Surge Current

1.2kA Models: 75kA crest (4 x 10  $\mu$ s waveform)  
All Other Models :100kA crest (4 x 10  $\mu$ s waveform)  
AC Steady-State Current (amperes - rms) 50/60Hz  
45A (Standard)

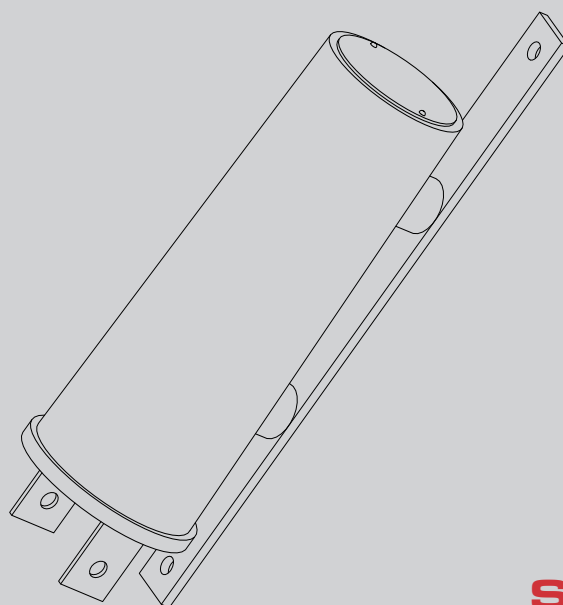
### Environmental rating:

IP68 - submersible (to 2m depth)

### Hazardous Location Certifications:

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

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



**SSD**  
**Solid-State Decoupler**