

Generic Solid State Decoupling Device Data Sheet (SSD-DCD)

Performance Specification	
Product Option	Polarization Cell Replacement
Steady state AC current	45A
AC fault current rating	1,2kA; 2kA; 3.7kA; 5kA; 9kA; 14kA @ 500 mSec. (30 Cycles)
50Hz AC impedance	0.04Ω
Impulse Current Rating (Lightning)	Class 1 100kA @ 10/350μSec IEC 61643-1
Front of Wave spark over voltage	≤500V 1.2/50 μSec IEC 61643-1
DC Thresholds available as standard	Standard options (+1V/-3V); (+2V/-2V); (+1V/-12V) Other voltage threshold ranges available on request.
DC Leakage (blocked state)	≤ 1mA
Peak Inverse Voltage	1500V
Max Forward current	1200A
Ambient Temperature	-15 to +45°C
Air Clearance & Creepage distance	10mm Controlled atmosphere exposed 45mm min. IEC 61634-1
Protection against direct contact	No direct contact IEC 60529 test finger
Environment classification	
Hazardous area classification	Ex nA iiC T3 Gc.
Environment enclosure classification Non-Hazardous	IP68 Appropriate polymer based on application Product has various enclosure platforms.
Environment enclosure classification -Hazardous area	IP68 Black Polycarbonate 3 rd Party certified to conform to ARP 10108 and IEC 60079-25
Housing Type	Application specific
Terminals	Male bolting facility 8mm
Cable Sizes	Warning: transient nature of surges introduce volt drop issues associated with cable impedance. Length of cable is therefore critical to ensure appropriate application.

Relevant Standards	
NFPA 70 - NEC	National Electrical Code – National Fire Prevention Association
NEMA / ATEX	IP ratings & Atmospheric zone applications – European & USA
IEC 62271-1	International Standards HV Control Gear – Sub clause 6.6
IEC 60079-0	Explosive atmospheres Part 0: Equipment – General Requirements
IEC 60079 – 15	Explosive atmospheres Part 15: Equipment Protection by type of protection “n”
IEC 60079 – 25	Explosive atmospheres Part 25: Atmosphere classification
IEC 61643-1	Low-Voltage surge devices
IEC 60529	Degrees of protection provided by enclosures
IEC 10108	Hazardous Area Classification

