Generic Solid-State Decoupling Device Data Sheet (SSD)

Performance Specification	
Product Option	Solid State De-coupler (SSD)
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; +2/-2; +2/-5.6; +2/-9.2; +2/-12.8; +2/16.4 & +2/-20V Other voltage threshold ranges available on request.
DC Leakage (blocked state)	≤ 1mA
Peak Inverse Voltage	1800V
Max Forward current	140A through 380A depending on range selection
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 area	IP68 (Water Submersible) - Appropriate polymer based on application Product has various enclosure platforms. NEMA 4
Environment enclosure classification -Hazardous area	IP68 (Water Submersible) - Black Polycarbonate 3rd Party certified to conform to ARP 10108 and IEC 60079-25
Housing Type	Application specific
Terminals	Male bolting facility 8mm / 25mm2 Cable Leads
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	
NEC	National Electrical Code
NEMA / Ingress Protection	Ingress Protection ratings & Environmental 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
IEC 60747	Semiconductor devices.