

Eaton® SPDI Series

Class I & II/Cat D, C & B, Din Rail Mounted Surge Diverters

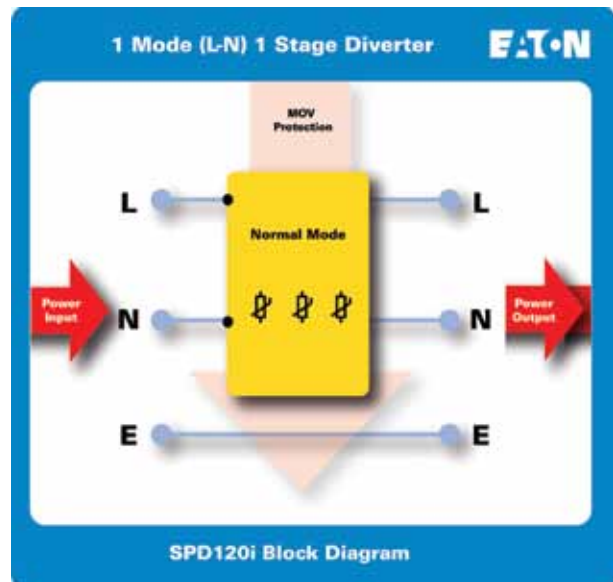


Key Features:

- Surge ratings starting from 40kA up to 100kA (8/20uS)
- DIN43880 profile IP20 enclosure allows compatibility with most common switchboards
- Versatile mounting clips offer the option of DIN rail or surface mount with ease
- Clear & concise protection status indicators & a dry-contact alarm
- Extended voltage range to suit most common power distribution systems

Shunt Surge Diverter, 1 & 3 Phase, 40kA & 100kA

Eaton's SPDI surge diverters provide the ultimate solution for surge protection in single & multi-phase systems. Whether the application involves residential homes, telecommunication facilities, hospitals, schools or heavy industrial plants, the SPDI surge diverters provide protection against the damaging effects of lightning, utility switching, switching electric motors & more. SPDI surge diverters can be installed as point-of-entry or sub-board protection & are connected in parallel with the power circuit via separate protection HRC fuses. These devices are ideal for Category C & B locations.



The SPD120I is designed to protect single-phase power systems against surges & spikes caused by lightning strikes & other electrical sources. The unit is intended for point-of-entry or main board protection in medium to high exposed locations. SPD120I are easily configured for L-N or L-E protection for installations adjacent or remote from the M.E.N. link, which means it can provide protection for commercial buildings to rural sites.

Eaton® SPDI Series

Class II/Cat C & B, Din Rail Mounted Surge Diverters

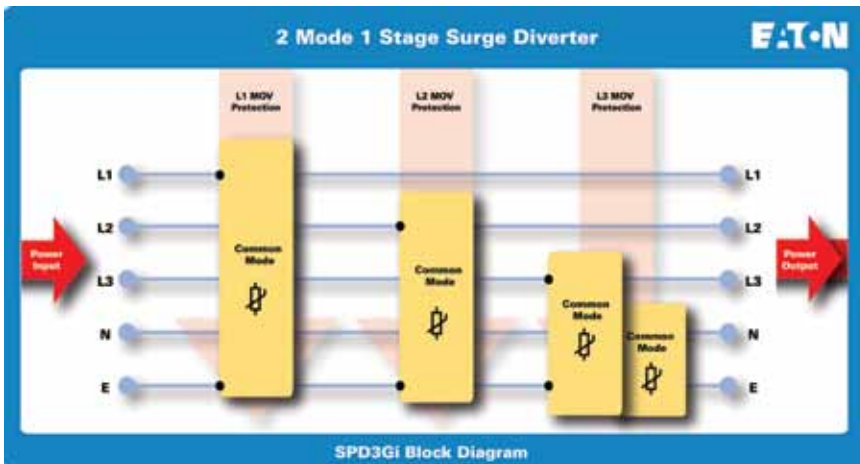
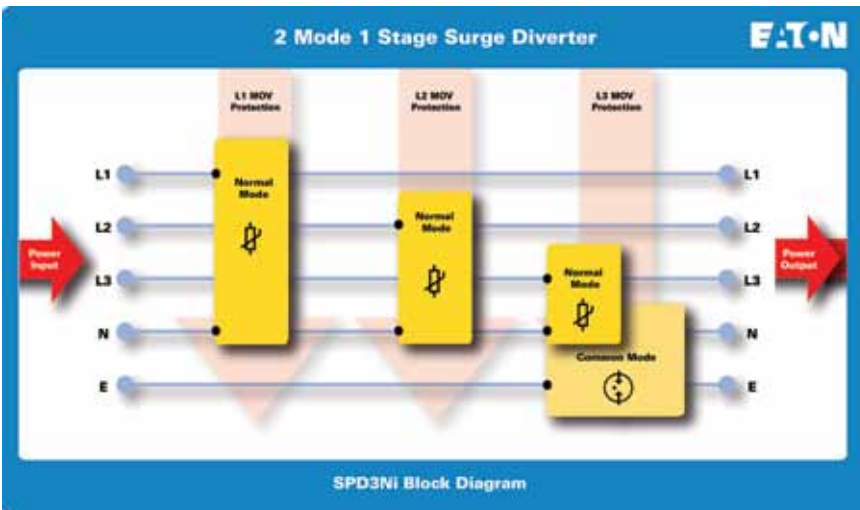


Class II/Cat C & B

Applications:

- Ideal for Point of Entry or Sub-board Protection
- Telecommunication Systems & Rectifiers
- Process & Control Systems
- Computer Systems
- Medical Systems
- All Sensitive Electronic Equipment

The SPD3NI is designed to protect 3-phase power systems against damage from surges & spikes caused by lightning & other electrical sources. The unit is intended for point-of-entry or sub-board protection in low to medium exposed locations adjacent to the M.E.N. link. For protection in locations remote from the M.E.N. link use a SPD3GI Gas Arrestor model.



Surge Category

The SPDI is suitable for use in category locations:

Class II/Cat D

(6kV/30kA) Point of Entry, High Exposure (SPD120I Only)

Class II/Cat C

(6kV/15kA) Point of Entry/ Service Entrance

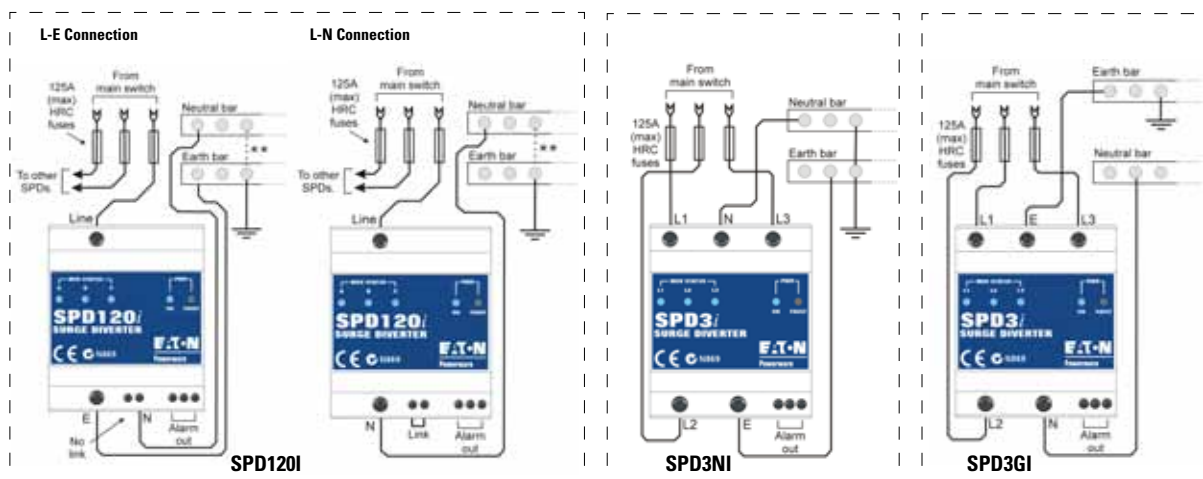
Class II/Cat B

(6kV/3kA) Major sub mains & short final sub circuits

Technical Specifications	SPD120I	SPD3NI	SPD3GI
Input voltage	220-277VAC (380-480V) 40-70 Hz	220-277VAC (380-480V) 40-70 Hz	220-300VAC (380-520V) 40-70 Hz
Maximum continuous operating voltage (MCOV)	320VAC		350VAC
Temporary overvoltage - TOV	350VAC, 15 mins		420VAC, 15 mins
Service Type	TN-C & TN C-S (3-wire with grounded neutral)		TN-S & TT (3-wire with grounded neutral)
Test Classification (IEC61643-1)	Class II		
Initial clamp voltage	560V		680V
Maximum rated surge current - Ismax 8/20us	100kA	40kA / Phase	
Nominal surge current - In 8/20us	50kA	20kA / Phase	
Residual voltage (Vpl) @ 3kA, 8/20us	1.0kV	≤1.2kV L-N, 900V N-E	≤1.2kV L-N, 1.4kV N-E
Residual voltage (Vpl) @ 40kA, 8/20us	1.65kV	≤2.1kV L-N, 1.46kV N-E	≤2.1kV L-N, 2.45kV N-E
Energy absorption (2ms)	2130 Joules		3640 Joules
Nominal surge lifetime (In)	50kA (8/20us), 20 times	20kA (8/20us), 20 times	
Recommended maximum over-current protection	gG/gL HRC fuses, 1 per phase, 125A maximum		
Terminations	Power terminals 16mm ² , Alarm terminals 1.5mm ²		
Alarms/Indicators	5 indicators, dry contact alarm relay - 250VAC/32VDC, 5A		
Design standards	IEC61643-1, IEC610006, ANSI/EEE C62.41, AS1768-2007, AS3100, CE mark		
Dimensions & Weight	(DIN43880) 70 x 68 x 90 mm (WxDxH), 200g		

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Connection Diagrams



Important: Before installing the device, please read & follow the installation & operating instructions.