

EAT•N

Powerware

SPDi DIN Surge Diverters

Product Focus

Surge suppression for industrial, commercial and residential applications



Professional,
high performance
surge protection
designed for **Australian**
conditions

Eaton's SPDi surge diverters provide the ultimate solution for surge protection in single and 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 and more.

SPDi surge diverters can be installed as point-of-entry or sub-board protection and are connected in parallel with the power circuit via separate protection HRC fuses. These devices are ideal for Category C & B locations.

The units are housed in a genuine DIN43880 35mm profile enclosure, enabling them to be easily included in new designs or retrofitted into existing switchboards.

The SPDi utilises state-of-the-art MOV technology featuring embedded thermal fusing to ensure safe isolation during sustained and abnormal conditions or end-of-life. Front panel blue LED indicators show protection and MOV status with the added convenience of a dry-contact alarm to allow remote status monitoring.

Surge ratings starting from 40kA up to 100kA (8/20uS) provides superior point-of-entry or sub-board protection

DIN43880 profile IP20 enclosure allows compatibility with most common switchboards

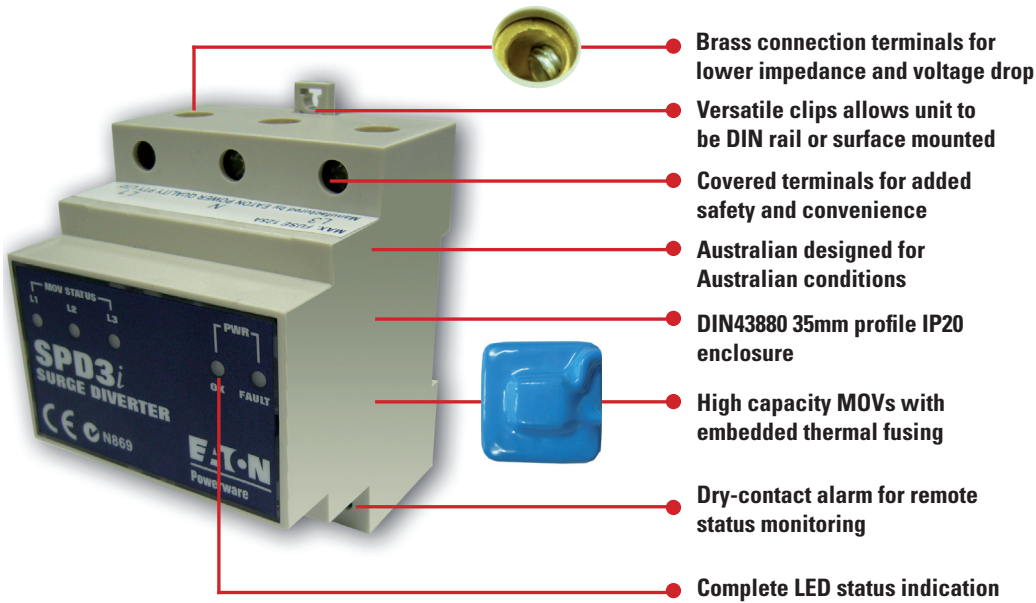
Units can be paralleled to achieve higher ratings or to extend operating lifetime

Versatile mounting clips offer the option of DIN rail or surface mount with ease

Clear and concise protection status indicators and a dry-contact alarm allows on or off-site monitoring

Extended voltage range to suit most common power distribution systems

Features and Benefits



Surface Mounted



DIN Rail Mounted

SPD120i

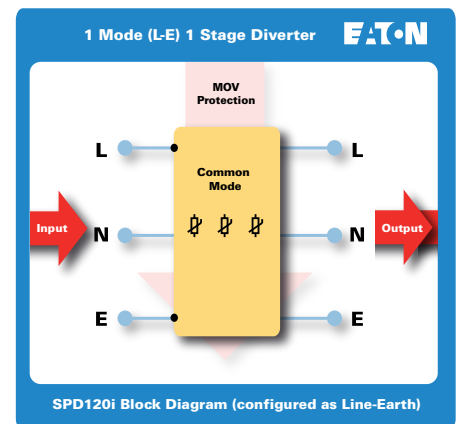
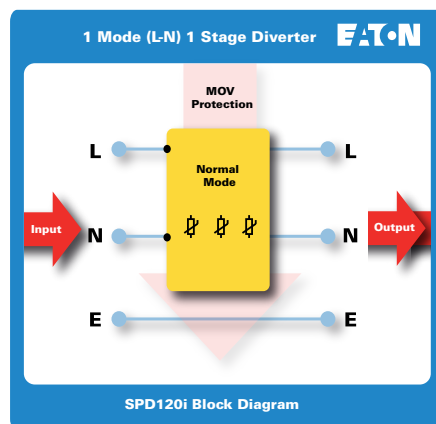


- ✓ 100kA (8/20 μ S) maximum rated surge protection
- ✓ Suitable for TN-C, TN-C-S, TN-S or TT systems
- ✓ Units can be DIN rail or surface mounted
- ✓ Ideal for point-of-entry or sub-board protection in industrial, commercial or rural locations.

The SPD120i is designed to protect single-phase power systems against surges and spikes caused by lightning strikes and 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.

The units are housed in DIN43880 enclosure, featuring blue LED indicators to show operating and MOV protection status and an alarm contact for remote monitoring.



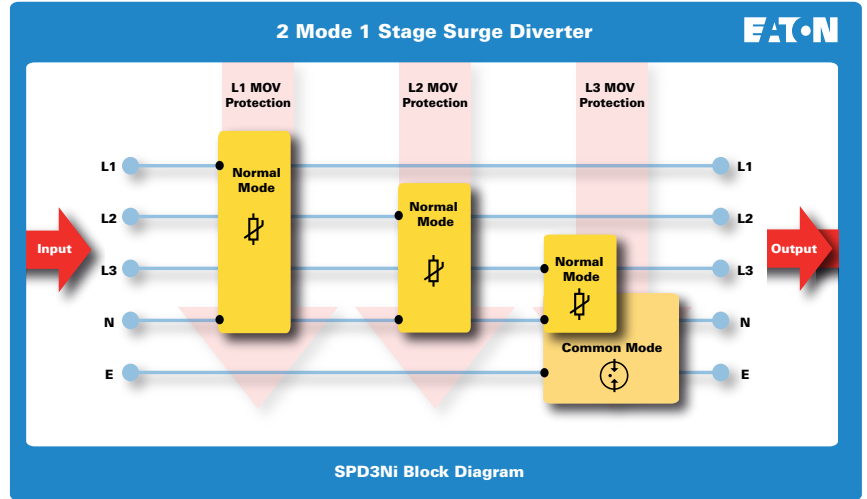
SPD3Ni



The SPD3Ni is designed to protect 3-phase power systems against damage from surges and spikes caused by lightning and 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.

SPD3Ni provides L-N & N-E protection with a maximum surge current rating of 40kA/Ph. The units are housed in DIN43880 enclosure, featuring blue LED indicators to show operating and MOV protection status and an alarm contact for remote monitoring.

- ✓ 40kA per phase (8/20uS) maximum rated surge protection
- ✓ Suitable for 3-phase TN-C and TN-C-S systems
- ✓ Units can be DIN rail or surface mounted
- ✓ Ideal for point-of-entry or sub-board protection in industrial or commercial locations with an adjacent M.E.N link



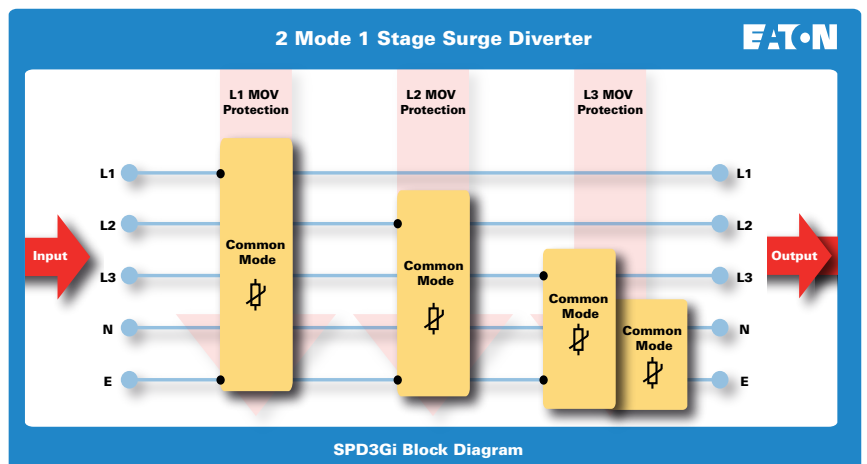
SPD3Gi



The SPD3Gi is designed to protect 3-phase power systems against damage from surges and spikes caused by lightning and other electrical sources. The unit is intended for point-of-entry or sub-board protection in low to medium exposed locations remote from the M.E.N. link.

SPD3Gi provides L-E & N-E protection with a maximum surge current rating of 40kA/Ph. The units are housed in DIN43880 enclosure, featuring blue LED indicators to show operating and MOV protection status and an alarm contact for remote monitoring.

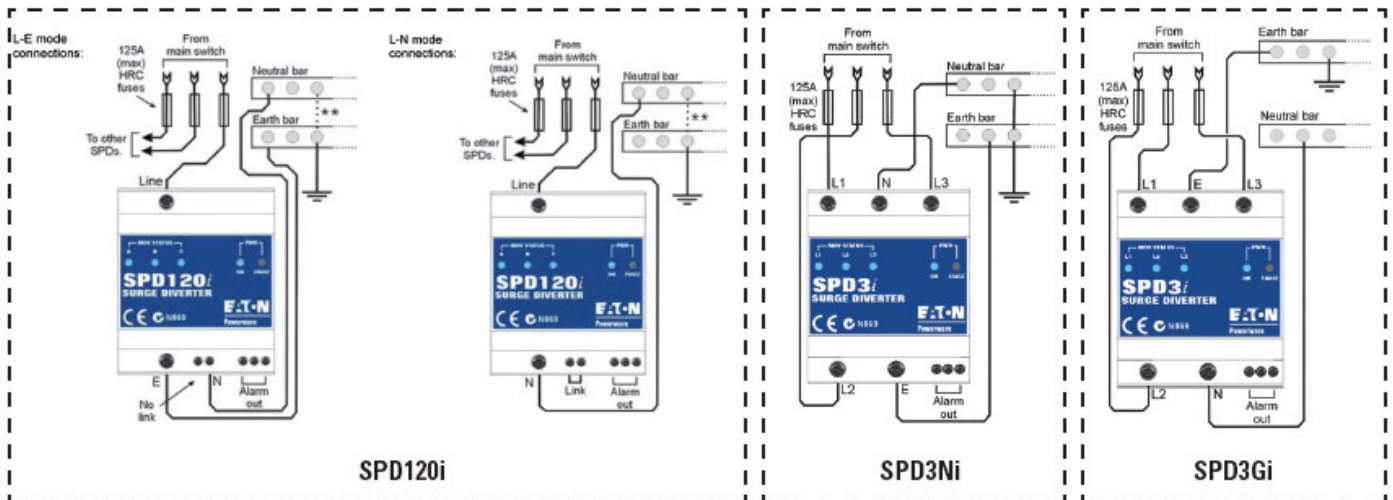
- ✓ 40kA per phase (8/20uS) maximum rated surge protection
- ✓ Suitable for 3-phase TN-S and TT systems
- ✓ Units can be DIN rail or surface mounted
- ✓ Ideal for point-of-entry or sub-board protection in industrial, commercial and rural locations remote from the M.E.N link



Specifications

Technical Specifications	SPD120i	SPD3Ni	SPD3Gi
Input voltage	220-277VAC (380-480V) 40-70 Hz, 1 Phase	220-277VAC (380-480V) 40-70 Hz, 3 Phase	220-300VAC (380-520V) 40-70 Hz, 3 Phase
Maximum continuous operating voltage (MCOV)	320VAC		350VAC
Temporary over-voltage (TOV)	350VAC, 15 mins		420VAC, 15 mins
Service type	TN-C and TN C-S (3-wire with grounded neutral)		TN-S and TT (3-wire with grounded neutral)
Test classification	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-E, ≤1.4kV N-E
Residual voltage (Vpl) @ 40 kA, 8/20us	1.65kV	≤2.1kV L-N, 1.6kV N-E	≤2.1kV L-E, ≤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 max 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/IEEE C62.41, AS1768-2003, AS3100, CE mark		
Dimensions & Weight	(DIN43880) 70 x 68 x 90 mm (W x D x H), 200g		
Warranty	12 Months		

Due to continuing product improvement programs, specifications are subject to change without notice. Copyright 2007



Important: Before installing device, read and follow the installation and operation guide.