

PSFi Series Portable Surge Filter

(Single Phase, 10A & 16A, 60kA Mass Aggregate)

APPLICATIONS:

- Plug-in UPS Systems
- Servers
- Portable Instrumentation
- Point of Sale Systems
- Small office systems
- Industrial/surge prone sites

FEATURES:

- Surge suppression and filtering in a single package
- 3 Mode protection
- Surge suppression rating of 40kA (8/20 μ S) L – N, 10kA L – E, 10kA N – E
- Rugged IP24 enclosure
- IEC Input & Output connectors

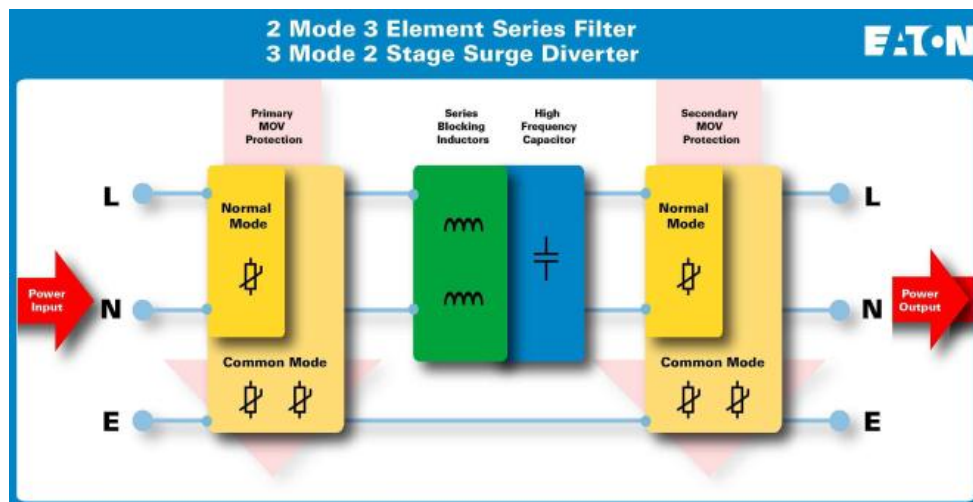


FUNCTIONAL DESCRIPTION

The PSFi is a 3-stage protection surge protector utilising high kA primary and secondary MOV protection in conjunction with an L/C filter. In addition, the PSFi also provides filtering of line harmonics and high-frequency noise with a cut-off frequency of ~10kHz and a nominal attenuation of 40dB.

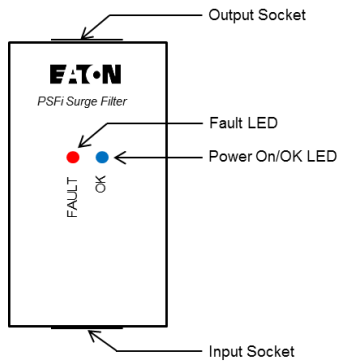
The PSFi series is designed to provide secondary protection against power surges caused by external sources such as lightning strikes and electrical switching as well as providing a measure of protection from surge events generated on the secondary side of the filter. The PSFi has been designed in accordance with AS3100, AS1768, IEC61643-11, IEC61000-6-1, 2, 3, 4 and other standards and codes as applicable.

FUNCTIONAL DIAGRAM



OPERATION

1. Find a suitable location for the PSFi. The PSFi requires free airflow for cooling. Do not stack items on top of the PSFi.
2. Connect load equipment to PSFi filter using appropriate leads.
3. Connect to a suitable power outlet. As the unit has no power switch, it is important that the power outlet's switch be easily accessible.
4. Apply power. "Power" indicator should light. If not, check connections or test power outlet with a known 'good' device.



Two indicator lights are fitted to the unit for mains power and protection failure indication:

Normal operation is indicated with the blue 'Power On' LED being lit.

In the event of MOV failure, the 'Fault' LED will light to inform the operator that the unit requires replacement.

IMPORTANT: If the 'Fault' light illuminates during operation, or the unit appears to malfunction in any way, return the unit for service or replacement.

Service Hotline 1300 303 059.

TECHNICAL SPECIFICATION

	PSF10i	PSF16i
Number of ports	2 Port	
Method of mounting	Portable.	
Input voltage – Uc	200-250VAC 1Ø	
Maximum continuous voltage – MCOV	320VAC	
Temporary overvoltage - TOV	350VAC 15 mins	
Service type	Single-phase, Line/Neutral/Earth	
Test classification	Class II	
Nominal discharge current - In 8/20us	In L-N 20kA, N-E 3kA, L-E 3kA	
Current rating - continuous	10 Amps	16 Amps
Recommended maximum over current protection	20A upstream circuit breaker or fuse.	
Residual current	<0.5 mA	
Protection modes	Line-Neutral, Line-Earth, Neutral-Earth	
Maxi surge current - Ismax 8/20us (Line-Neutral)	40kA	
Nominal surge lifetime	15 hits @ 20kA (8/20uS, each mode)	
Filter attenuation	40dB nominal at 1MHz	
Initial clamp voltage (Line-Neutral)	560V (350Vac RMS)	
Initial clamp voltage (Line-Earth, Neutral-Earth)	680V (420Vac RMS)	
Residual voltage (Vpl) Line-Neutral 8/20us	<900V @ 3kA	
Internal protection (fusing)	Thermal fusing on primary MOVs	
Terminations	Input - IEC C14 10A (1) Output - IEC C13 10A (1)	Input - IEC C20 16A (1) Output - IEC C19 16A (1)
Alarms/indicators	2 part display, Power OK, Protection fault.	
Location Category	Indoor	
Enclosure rating	IP24	
Standards. Designed in accordance with :	IEC61643-11, IEC610006-1,2,3,4 ANSI/IEEE C62.41 Cat B AS1768-1991 Cat B AS3000,AS3100,	
Dimensions	205mm (L) x 90mm (W) x 55mm (H)	
Weight	1kg	
Environment	-10 to 50°C, 0 to 95%RH (non-condensing)	
Warranty	1 year, workmanship and materials	

Specifications are subject to change without notice. Copyright 2013 Eaton Industries Pty Ltd