

Eaton® DSFI

Class II/Cat B & A, Single Phase High Performance Surge Filter



Series Filter with Shunt Surge Diverter,
1 Phase 5-32A, 40kA Primary

Applications:

- Secondary power circuits/Sub-boards
- UPS Systems & Rectifiers
- Telecommunications Systems & Rectifiers
- Process & Control Systems & UPS's up to 6kVA
- Computer Systems & Medical Systems
- AV circuits for clubs & hotels
- All sensitive Electronic Equipment

Key Features:

- Surge suppression & filtering in a single package
- Modular design
- Enclosed in IP20 painted steel housing
- Protection Fail Alarm Relay
- 3 mode, 3 Stage Protection
- 5 Year Warranty

The DSFI is designed to provide secondary protection against power surges caused by external sources such as lightning strikes & substation switching as well as providing a measure of protection from surge events generated on the secondary side of the filter.

The DSFI is a 3-stage protection unit utilising primary & secondary MOV protection in conjunction with a 2-stage Low-Q LC filter (i.e. 2 inductive coils) using separate differential mode & common mode circuits. The unit provides filtering of the line harmonics, noise & RF transmitters with a cut-off frequency of <1.5kHz & a minimum attenuation of >55dB to 10MHz.

Secondary MOV protection (in all 3 modes) is located after the inductive coils, to provide further surge reduction & to protect against load-generated surges. An ideal device for Category B & A locations.

Surge Category

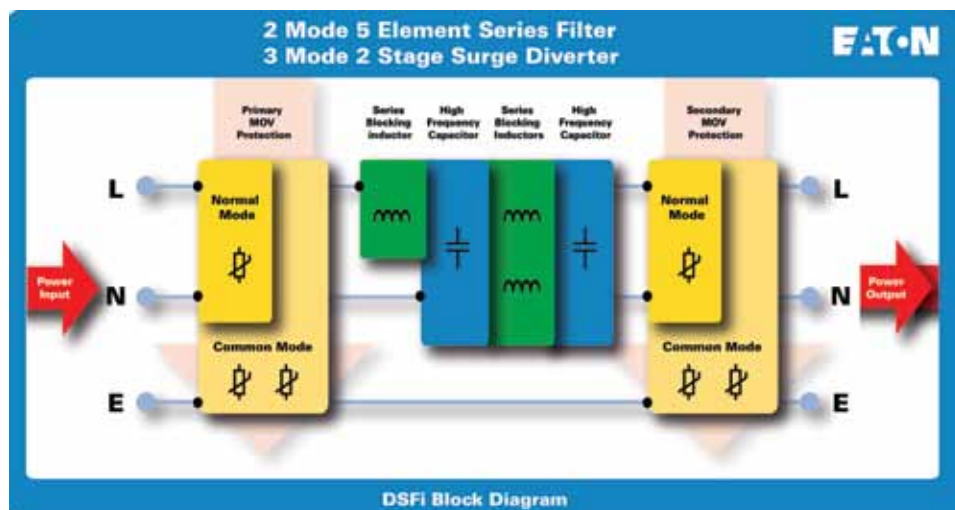
The DSFI is suitable for use in category locations:

Class II/Cat B

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

Class II/Cat A

(6kV/200A) Long final sub circuits & power outlets



Technical Specifications	DSFI
Input voltage	200-250VAC 1 Phase
Service type	TT, TN, TN C-S or any single-phase system with a grounded neutral.
Test Classification	Class III (IEC 61643-1), Category A & B (ANSI/IEEE C62.41)
Energy Absorption rating - per mode (joules)	Primary Protection L-N = 740 J Primary common mode protection L-E & N-E = 780 J Secondary protection L-N = 225J Secondary common mode protection L-E & N-E = 480J Aggregate rating = 2,225J
Current rating – continuous	5 - 32A
Recommended max. overcurrent protection	32A (C curve MCCB)
Short circuit withstand (1 sec)	Suitable for use with a 6kAIC C Curve MCB
Protection modes	Line-Neutral, Line-Earth, Neutral-Earth
In 8/20us (Line-Neutral)	15kA x 20 hits
In 8/20us (Line-Earth)	10kA x 20 hits
In 8/20us (Neutral-Earth)	10kA x 20 hits
Ismax 8/20us (Line-Neutral)	40kA
Ismax 8/20us (Line-Earth)	25kA
Ismax 8/20us (Neutral-Earth)	25kA
Filter attenuation	>55dB to 10MHz
Internal protection (fusing)	Thermal
Terminations	10mm ² PCB Mounted Terminals
Alarms/indicators	2 LED display, Power OK & Protection OK LEDs, Dry contact alarm relay output – 250Vac/32Vdc, 5A, 5kV isolation, Alarm under-voltage cutoff 180Vac
Enclosure rating	IP20
Design Standards:	IEC61643-1, IEC610006-1,2,3,4 ANSI/IEEE C62.41 Cat B,C,D,E AS1768-2007 Cat B,C,D,E AS3000,AS3100, CE mark
Dimensions & Weight	140 x 50 x 270 mm (W x D x H), 1.5kg
Environment	-10 to 65°C, 10 to 90%RH (non-condensing)

Due to continual product improvement specifications are subject to change without notice. Copyright 2010 Eaton Corporation.

Connection & Line Diagram

