Eaton® CSFI

Class II/Cat B & A, Din Rail Compact Surge Filter

Series Filter with Shunt Surge Diverter,
1 Phase 3-25A, 25kA Primary

Applications:

- Secondary power circuits, Sub-boards
- UPS Systems & Rectifiers
- Telecommunications Systems
- Process & Control Systems, Homes & Units
- Computer Systems & Medical Systems
- All sensitive Electronic Equipment

Key Features:

- Surge suppression & filtering in a single package
- Modular design
- Enclosed in IP 20 ABS plastic housing
- DIN rail mountable (4 pole wide)
- Protection Fail Alarm Relay
- 3 mode, 3 Stage Protection
- 12 Month Warranty

The CSFI is designed for mounting in distribution boards 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. An ideal device for Category B locations.

The CSFI is a 3-stage protection unit utilising primary & secondary MOV protection in conjunction with a Low-Q LC filter. The unit provides filtering of the line harmonics, noise & RF transmitters with a cut-off frequency of <10kHz & a nominal attenuation of >60dB.

All CSFI units are provided with indicators showing power & protection status. Alarms are indicated on the front panel of the unit. The alarm function provides a summary alarm output for protection degradation as well as power failure. The protection alarm is configured to partial protection failure. The summary alarm relay contacts provide remote signalling to other equipment.

Surge Category

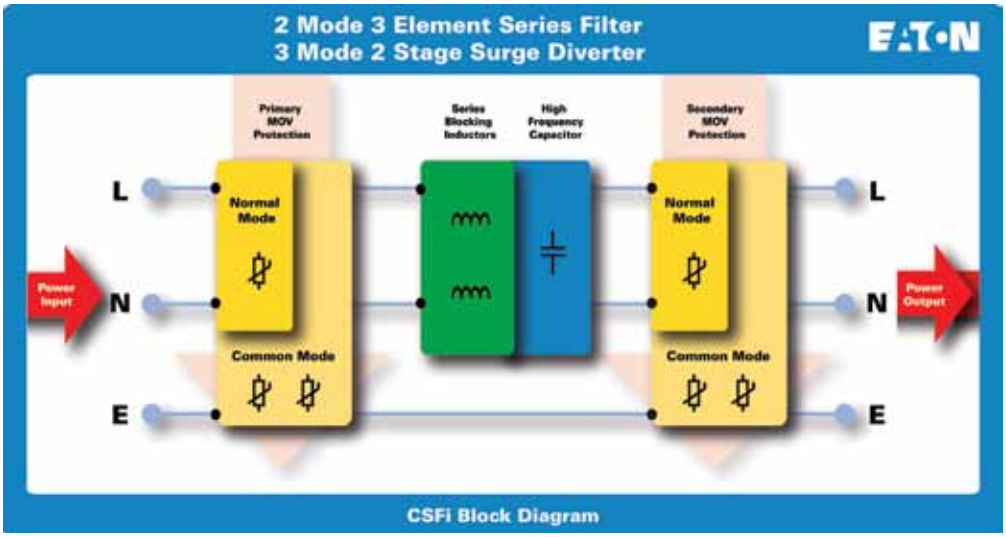
The CSFI is suitable for use in category locations:

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



PowerChain Management®

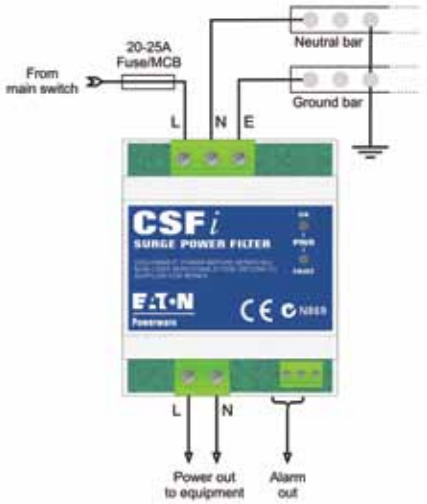
Eaton® CSFI

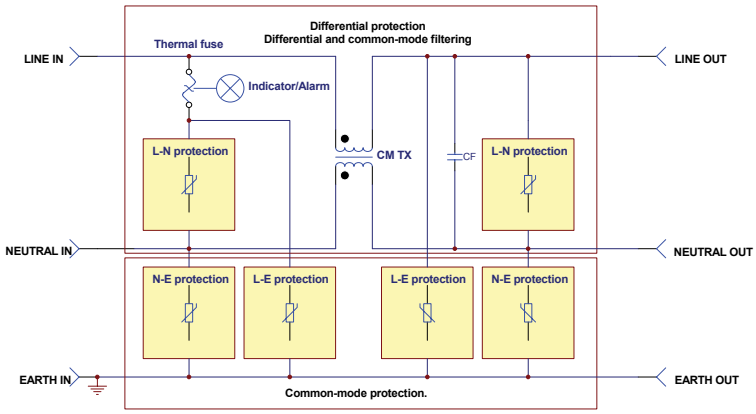
Specifications

Technical Specifications	CSFI
Input voltage	200-250VAC 1 Phase
Service type	TT, TN, TN C-S or any single-phase system with a grounded neutral. This unit must not be connected to an ungrounded system
Test Classification	Class III (IEC 61643-1), Category A & B (ANSI/IEEE C62.41)
Energy Absorption rating - per mode (joules)	Primary protection L-N = 370J Primary common mode protection L-E & N-E = 480J Secondary protection L-N = 225J Secondary common mode protection L-E & N-E = 480J Aggregate rating = 1555J
Current rating - continuous	3 - 25A
Recommended max. overcurrent protection	25A (C curve MCB 25A)
Protection modes	Line-Neutral, Line-Earth, Neutral-Earth
In 8/20us (Line-Neutral) Nominal surge life	10kA x 20 hits
In 8/20us (Line-Earth) Nominal surge life	3kA x 20 hits
In 8/20us (Neutral-Earth) Nominal surge life	3kA x 20 hits
Ismax 8/20us (Line-Neutral) Max surge level	25kA
Ismax 8/20us (Line-Earth) Max surge level	10kA
Ismax 8/20us (Neutral-Earth) Max surge level	10kA
Filter attenuation	62dB above 1MHz
Internal protection (fusing)	All surge diverter connections are fused via HRC fuses to IEC269-2-1
Terminations	6mm² 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
Location Category	Indoor
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	70 x 68 x 90 mm (W x D X H), 200g
Environment	-10 to 65°C, 10 to 95%RH (non-condensing)

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

Connection & Line Diagram





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