

Facility Filters—Branch Circuit Protection



100% Surge Protection, 0% Failure

Zero Surge series mode products protect connected equipment repeatedly from even worst case surges without degradation or failure. Zero Surge's core technology has been certified for performance and endurance, in addition to safety. It was subjected to 1,000 worst case surges of 6,000 Volts/3,000 Amps in 30 second intervals without any resulting degradation or failure. This equates to 10 years of worst case surges, but Zero Surge's in-service history proves that the products will serve far beyond a 10 year life. There have been no reports of surge failures, no fires, and no recalls since Zero Surge began manufacturing in 1989.

Zero Surge's Spectrum Wide Voltage Range (WVR) technology, effectively senses and suppresses surges on your 120V power line even when the power is low as 85 Volts or high at 175 Volts and anywhere in between. This is especially beneficial when the voltage is variable and unpredictable, during brownout and blackout conditions, and when standby generators are in use. It also provides the benefit of conditioning the power line by removing EMI and RFI disturbances which can disrupt data signals and cause electronic equipment to malfunction. These disturbances can also degrade the electronic components in the equipment, shortening the life expectancy.

The superior power conditioning and high reliability provided by Zero Surge's series mode with Spectrum WVR technology makes it the preferred choice in commercial/industrial market.

Features:

- NEMA4 Weather Resistant Enclosures with Screw Covers
- Protects dedicated lines
- Easy Installation
- Repeatedly suppresses worst case surges
- No metal oxide varistors (non-MOV technology)
- Non-sacrificial—does not wear out or degrade
- Made in USA
- 10 year warranty
- No history of surge damage or product recalls
- X10 Compatible (will not block the signal)

Model	Item #	Max Amperage Voltage (AC) / Hz	Over-current Protection	Wire Connector
FF4-5W-120	#002-00628	1 @ 5A / 120V / 50-60 Hz	5x20mm, 5A, 250V Slow Blow Fuse	4 Position Terminal Block (hot leg in, hot leg out, 2 neutral connections)

Technical Specifications	FF4-5W-120 #002-00628
Voltage Rating	5A / 120V *
Over-current Protection	5x20mm, 5A, 250V Slow Blow Fuse
Operating Temperature Range	0-40° C / 32-104° F
Technology/Mode	Series Mode with Wide Voltage Range (WVR) Technology, Mode 1 applications, L-N (filter operates independent of ground line)
Agency Certifications	ETL & cETL certified to UL 1283 7th Edition, CSA 22.2 No. 8 (Control #3162119)
Limiters	Series surge reactor current limiter; cascaded, auto-tracking dual polarity dynamic surge and noise sensing; bi-modal dynamic filtering. Parameters optimized for switch-mode power supply protection.
Dynamic Filtering Onset	172V nominal, 2V above peak line voltage (auto-tracking, WVR)
Max Surge Voltage Let-through	130V above peak line voltage @ 6,000V/3,000A for ANSI C62.41 Category B3/C1 Combination Wave
Max. Applied Pulse Voltage	6,000V (1.2 x 50 μs—ANSI C62.41 Combination Wave)
Max. Applied Pulse Current	Does not apply to this technology.
Joule Rating	No metal oxide varistors to wear out; therefore, not applicable to this technology.
Endurance Rating	1,000 worst case pulses: ANSI C62.41, Category B3/C1 pulses (6,000V/3,000A); >10,000 pulses @ 4,000V; >100,000 pulses @ 2,000V
Filter Slew Rate	5,000V/μs disturbance reduced to 35V/μs within AC power wave envelope; 10V/μs outside the power wave envelope
EMI/RFI Filter Response (50 ohm Rgen., load)	Bi-directional, wave tracking — 3 dB @ 7 kHz; 25 dB @ 100 kHz; 38 dB @ 300 kHz
Enclosure	NEMA4 weather resistant enclosure, screw cover, with knockouts
Weight	1.5 lbs
Dimensions	7.9" H x 4.8" W x 3" D

*L-N reversal can compromise any appliance's safety and performance. Check line wiring for hot/neutral reversal prior to connecting product. Warning: Must be installed by a licensed electrician following NEC and local codes.

Suggested applications: Dedicated lines to barn/agricultural equipment, water treatment controls, damp environments or areas where splash can occur.



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ZERO SURGE INC. • 889 STATE RT 12 • FRENCHTOWN, NJ 08825 • PHONE 800-996-6696 • FAX 908-996-7773
www.ZeroSurge.com