

## FF1-8W Series - NEMA1 8amp WVR Single Phase

Models	FF1-8W-120	FF1-8W-240E
Mfg Part #	002-00076	002-00080
Voltage/Hz	120V ac nominal 50-60 Hz	240V ac Single leg with neutral line 50-60 Hz
Max. Amperage	8 amps	8 amps
Box Connectors	Supplied by customer, to fit standard knockouts *	
Ground Connect	Flying leads from ground screw, attach using wire nuts	
Wire Connector & recommended attachment	.250" quick disconnects	
Over-current Protection	Filter must be installed on a branch circuit with over-current protection of 20 amps	
Enclosure	NEMA1 screw cover box w/ knockouts 10"H x 8"W x 4"D	
Weight	6 lbs	6 lbs
Boxed Dim./Wt.	11.5" x 9" x 5.5" / 7 lbs	11.5" x 9" x 5.5" / 7 lbs

\* **WARNING:** Must be installed by a licensed electrician following NEC and local codes.



## X10 Carrier Current Compatible

**NO  
MOVs**

Specifications	120 Volt Product	240 volt Product
<b>Voltage Ratings</b>	US 120 Volt, single phase (one hot leg & a neutral leg tied to earth ground at service entrance). Will operate over a voltage range of 85 - 175 volts with Spectrum WVR technology (MCOV=175Vac). Full load regulation 1%.	European 240 Volt, single phase (one hot leg & a neutral leg tied to earth ground at service entrance). Will operate over a wide voltage range of 85 - 280 volts with Spectrum WVR technology (MCOV=280Vac); NOT COMPATIBLE WITH U.S. 240V (with two hot legs).
	Check line wiring for hot/neutral reversal prior to connecting this filter. Hot/neutral reversal is a critical safety issue and will prevent this product from functioning effectively.	
<b>Operating Temperature Range</b>	0-40 deg. C	
<b>Technology</b>	Spectrum WVR® Wide Voltage Range filter technology	
<b>Mode</b>	Mode 1 applications, L-N (ground wire protection)	
<b>Safety Certifications</b>	CSA 22.2 No. 8-M1986, UL 1283 5 <sup>th</sup> edition pending.	
<b>Limiters</b>	Series mode inductor current limiter; auto-tracking dual polarity dynamic sensing; dual dynamic filtering. Parameters optimized for switch-mode power supply protection.	
<b>Dynamic filtering Onset</b>	172 volts nominal, 2 volts above peak line voltage (auto-tracking- WVR). (350 volts nominal for 240v units)	
<b>Max Surge Voltage Let-through*</b>	130 Volts above peak line voltage @ 6,000 Volts, 3,000 Amps for ANSI C62.41 Category B3/C1 Combination Wave. (350 volts for 240 volt units)	
<b>Max. Applied Pulse Voltage</b>	6,000 volts (1.2 x 50 $\mu$ s – ANSI C62.41 Combination Wave)	
<b>Max. Applied Pulse Current</b>	>100,000 amperes applied (unlimited due to internal current limiting) (8 x 20 $\mu$ s).	
<b>Joule Rating</b>	Not applicable to this technology. No MOV's to wear out.	
<b>Endurance Rating</b>	1,000 worst case pulses: ANSI C62.41, Category B3/C1 pulses (6,000 Volts, 3,000 Amperes); >10,000 pulses at 4,000 Volts; >100,000 pulses at 2,000 Volts.	
<b>Filter Slew Rate</b>	5,000 volts/ $\mu$ s disturbance reduced to 28 v/ $\mu$ s within AC power wave envelope; less than 10 v/us outside the power wave envelope.	

\* Note: Surge voltage let-through is the peak voltage that exceeds the powerline peak voltage

**100% Surge Protection, 0% Failure • Are you Zero Surge protected?**

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