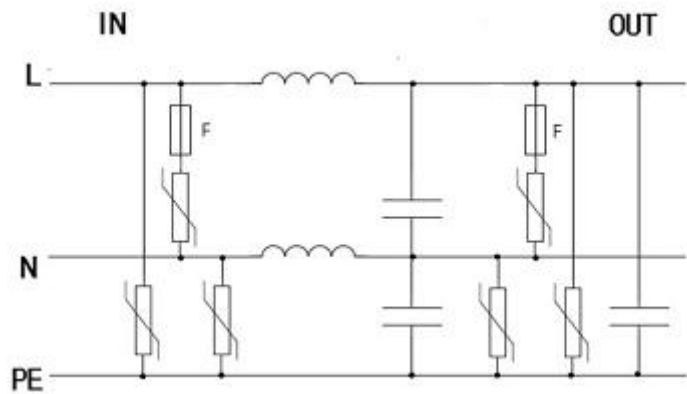


# POWER SUPPLY

## Single phase 20A/32A/45A Surge Filter BSF Series, BSF50-1/...-45A-3P

■Type 2+3 ■2-Port SPD ■20~45A filter ■ I<sub>max</sub> 50kA

- Multi-stage protection circuit with LC Filter design to protect sensitive electronics.
- Provides extensive high frequency & RF filtering
- Application for 120~127V, 220~277V (L-N) TT/TN, or any single phase system with a grounded neutral
- Protection capability 50 kA 8/20us
- Load current rating 45A, 20~32A is available
- All mode protection
- LED failure indication & remote alarm function available
- Comply with UL1449 4th, IEEE C62.41, CSA C22.2, IEC/EN 61643-11



Model		BSF50-1/180-45A-3P	BSF50-1/320-45A-3P	BSF50-1/420-45A-3P	BSF50-1/550-45A-3P
According to		IEC61643-11; UL1449-4th; IEC610006; ANSI/IEEE C62.41; AS1768-1991;AS3100			
Category IEC/EN/UL		Class II+III/ Type 2+3 / Type 2			
Protection Mode		All mode protecton			
Protection technology		MOV tech,Thermal protection LC filter, Built-in backup fuse			
Power system	U <sub>n</sub>	120~127V single phase	220-277V single phase	347V single phase	480V single phase
Max. continuous operating voltage (AC/DC)	U <sub>c</sub>	180/230	320/420	420/560	550/745
Rated load Current	I <sub>l</sub>	45A			
Nominal discharge current(8/20)	I <sub>n</sub>	L-N 20kA, N-E 10kA, L-E 10kA			
Max. discharge current(8/20)	I <sub>max</sub>	L-N 50kA, N-E 25kA, L-E 25kA			
Voltage impulse (1.2/50us)	U <sub>oc</sub>	20kV			
Total surge capacity per Line	I <sub>total</sub>	150kA (8/20us)			

## POWER SUPPLY

Voltage protection level	L-N @6kV/3kA	VPR	<0.6kV	<1.0kV	<1.4kV	<2.0kV
	L/N-PE@6kV/3kA	VPR	<0.7kV	<1.2kV	<1.6kV	<2.2kV
	L-N @In	Up	<0.8kV	<1.2kV	<1.6kV	<2.3kV
	L/N-PE@In	Ip	<0.9kV	<1.4kV	<1.8kV	<2.5kV
Residual Current	I <sub>PE</sub>	<1mA				
Voltage drop:		< 2V at rated load current				
Temporary overvoltage TOV —Withstand mode	U <sub>tov</sub>	240V/5s	400V/5s	600V/5s	690V/5s	
Response time	T <sub>a</sub>	<5ns				
Filter attenuation	dB	>60dB @ 1MHz/ >15dB @ 100kHz >0.5dB @ 1kHz				
Recommended external over current protection in series		45A Fuse or CB				
Protect Status Indication		2 part display, Power OK, Protection fault				
Remote alarm		Dry contact alarm relay – 250Vac/32Vdc, 5A				
Connecting cable		Power 8-10AWG , Alarm 14 -22AWG,				
Environment		Temperature Range: - 10°C ~ +60°C Humidity: ≤95% Altitude: ≤2000m				
Mounting		Wall mounting				
Location Category		Indoor				
Degree of protection		IP20				
Dimension		220mm (L) x 143mm (W) x48 mm (H) approx				
Weight		1.2kg approx				
Approvals, Certification		CE				

## Other Models

Power System	Load Current	Model Recommended	Recommended External Over Current Protection In Series
Single phase 2W+G	20A	BSF50-1/...-20A-3P-S	20A CB/Fuse
	32A	BSF50-1/...-32A-3P-S	32A CB/Fuse