

POWER SURGE FILTER



Provides high protection performance for electronic equipment at high exposed area by its high surge rating Spark gaps and transient discriminating technology diverters

- ◆ All mode protection
- ◆ High safety standard design
- ◆ Multi-stage protection for surges suppression and filtering
- ◆ High surge handling capability
- ◆ Internal staged LED status indication



All mode protection - PSF series high current surge filters provide unsurpassed surges and transients filtering for main panels used in medium to high exposure areas using any power distribution systems such as TT, TN-C, TN-S etc. They offer all mode(L-N, L-PE and N-PE) and repeated protection in lightning intense environment.

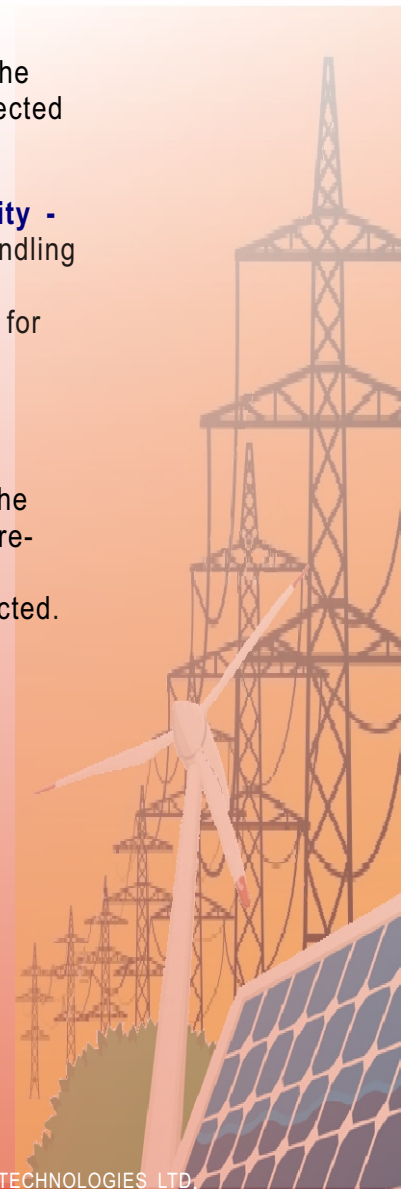
High safety standard design - It has been engineered to the industry's safest criteria for full compliance with IEC 61643-11 and UL1449 Edition4. By using modular design diverters with direct input and output connection makes PSF highly reliable and easy maintenance.

Multi-stage protection for surges suppression and filtering - No single technology can provide overall protection, so PSF surge filters utilize multi-stage design. The first stage rapidly diverts excess transient surges to ground by Spark gap. The second stage uses low pass filter to discriminate the noise, harmonics and remaining surges from the normal supply. The third stage

uses Transient Discriminating technologies diverter to ensure the impulses generated by the connected load will not return to the supply.

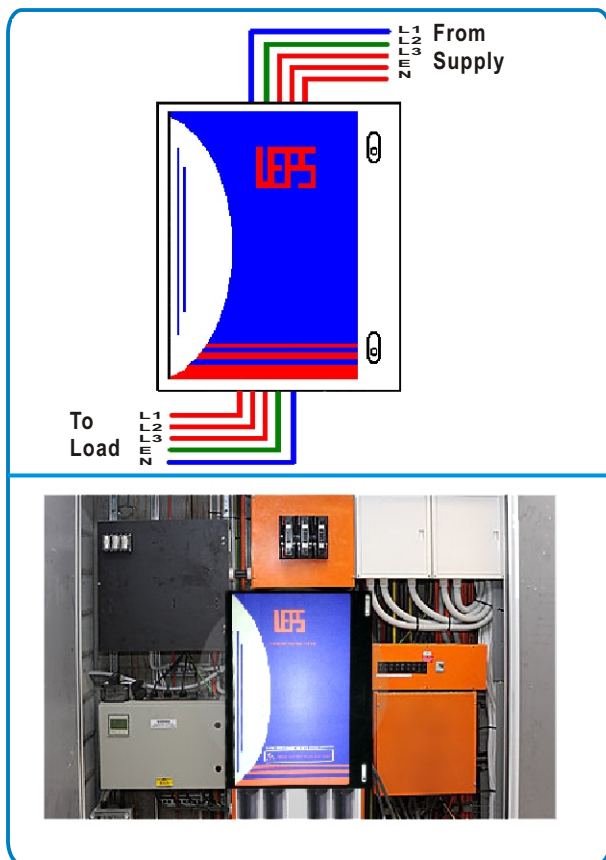
High surge handling capability - Its 130KA per mode surge handling capability makes PSF series protectors the ultimate choice for total facility protection.

Internal staged LED status indication - There are LED indicators per phase to monitor the integrity of the protection. This pre-failure warning indication design means you will never be unprotected.

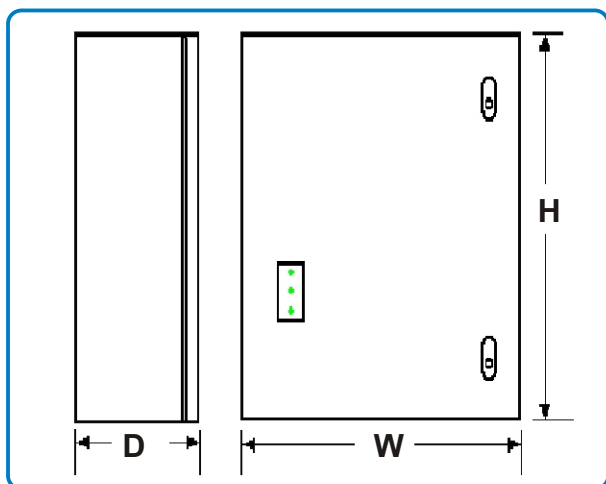


Installation

The filter is connected in series with the protected system (load) as illustrated below:



Dimensions & weight



MODEL	Load current	WEIGHT	D	H	W
PSF163-130M	63A	~17kg	200	500	400
PSF1125-130M	125A	~20kg	200	500	400
PSF363-130M	63A	~17kg	200	500	400
PSF3125-130M	125A	~20kg	200	500	400
PSF3250-130M	250A	~31kg	300	800	600
PSF3500-130M	500A	~56kg	300	1000	800
PSF3800-130M	800A	~75kg	300	1000	800

General Specifications

SPD class(EN/IEC):	Class I+II/Type 1+2	
Nominal voltage, U_n:	220/230/240VAC(L-N)	
Max. working voltage, U_c:	IEC61643-11 rating	255VAC(L-N) 310VAC(L-N)
	AS1768 rating	
Temporary Overvoltage, TOV:	IEC61643-11 rating	442VAC, 2 hours(L-N), 1200VAC, 200ms(N-PE)
Voltage protection level, $U_p(L-N)$:	IEC61643-11 rating	450V---PSFx63, PSFx125 @ limp 500V---PSFx3250 @ limp 550V---PSFx3500, PSFx3800, @ limp
	AS1768 rating	200V@3KA, 250@20KA, 8/20 μ s---PSFx63 300V@3KA, 380@20KA, 8/20 μ s---PSFx125 300V@3KA, 500@20KA, 8/20 μ s---PSFx250 320V@3KA, 550@20KA, 8/20 μ s---PSFx500 320V@3KA, 550@20KA, 8/20 μ s---PSFx800
Load current, I_L:	See table in Dimensions & Weight	
Operating frequency:	40-60Hz	
Connection type:	Series	
Technology:	First stage	Spark-Gap
	Second stage	LC low pass filter
	Third stage	TD technology with thermal disconnect
Max. discharge current, I_{max}:	130KA, 8/20 μ s (L-N/N-PE)	
Nom. discharge current, I_n:	60KA, 8/20 μ s (L-N/N-PE)	
Impulse discharge current, limp	10KA (L-N/N-PE), 10/350 μ s---IEC61643-11 rating 50KA (L-N/N-PE), 10/350 μ s---AS1768 rating	
Short circuit current rating(SCCR):	43KA	
Protection mode:	L-N, L-PE, N-PE	
Heat Dissipation:	30W---PSFx63-130M 55W---PSFx125-130M 95W---PSFx250-130M 210W---PSFx500-130M 260W---PSFx800-130M	
Voltage drop:	0.1% Maximum	
Frequency response:	-40dB (at 100KHz)	
Rate of voltage rise:	PSFx63-130M	5V/ μ s Max
	PSFx125-130M	10V/ μ s Max
	PSFx250-130M	11V/ μ s Max
	PSFx500-130M	10V/ μ s Max
	PSFx800-130M	10V/ μ s Max
Standards compliance:	BS EN/IEC61643-11 class I and II AS1768-2007 Cat.A,B,C IEEE C62.41.2:2002 Cat.A,B,C IEEE C62.41.2:2002 Scenario II, Exposure 3	
Status indicator:	Front panel LED (Green=OK)	
Wiring terminals:	10-35mm ² ---- PSFx63 25-120mm ² ---- PSFx125, PSFx250 10mm Stud--- PSFx500, PSFx800	
Case material:	Galvanized steel alloy(powder coated)	
Mounting:	Back panel screw mount(wall mount)	
IP rating:	IP65---PSFx63, PSFx125 IP32---PSFx250, PSFx500, PSFx800	
Operating temperature, T_u:	-40-85°C	
Humidity:	0-95%(R.H.)	
Altitude:	0-3650m	