

Type 2 AC Surge Protective Device

► Application

FSP-A series surge protection device (in short SPD, alias: surge suppressor surge arrester) is suitable for TN-S, TN-C-S, TT, IT, etc. power supply system of AC 50/60Hz, <380V, installed on the joint of LPZ1 or LPZ2 and LPZ3. It's designed according to IEC61643-1, GB18802.1, it adopts 35mm standard rail, there is a failure release mounted on the module of surge protection device. When the SPD fails in breakdown for over heat and over-current, the failure release will help electric equipments separate from the power supply system and give the indication signal, green means normal, red means abnormal, it also could be replaced for the module when has operating voltage.

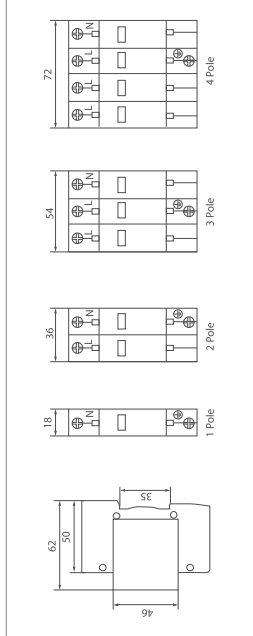
► Product Features

- ☐ Inside over-current and over-heat protection, temperature control open circuit.
- ☐ Module design, convenient installation, could be replaced online.
- ☐ Time of response <25ns
- ☐ The color of visible window shows operating status, green means normal, red means abnormal

► Specifications

Technical Parameters		1P	2P	3P	4P
Rated Operating Voltage Un(V-)		230V/275V			
Maximum Continuous Operating Voltage Uc(V-)		275/385/420VAC			
Voltage protection Level Up(V~kV)		≤2.5			
Nominal Discharge Current In μs kA		5	20	30	40
Maximum Discharge Current Imax μs kA		10	40	60	80
Response Time (ns)		<25			
Test Standard		IEC61643.1, GB18802.1			
Operating Environment(centigrade)		-40℃ ~+85℃			
Max Connection Line		35mm ² hard wire/35mm ² strand wire copper line			
Recommended Connection Line		16mm ² hard wire/25mm ² strand wire copper line			
Installation		Standard Rail 35mm			
Material of Outer Covering		Burning-proof Nylon			

► Overall Dimensions



Type 1+2 AC Surge Protective Device

► Application

Type 1 + 2 SPD's have characteristics as type 1 but also type 2, they are capable of discharging a very high lightning current (T1 10/350 μs) and they have as well a low residual voltage (Up). They are installed in the main distribution switchboard but also in subdistribution board. Because of their power, Type 1 + 2 SPD's can let pass through a too high residual voltage, if the announced Up is not compatible with the withstand voltage of the equipment to protect or if the cable length to the equipment is longer than 10m.

► Features

- ☐ Patented QuickSafe® technology
- ☐ Safety Reserve system
- ☐ Din rail mounting
- ☐ Pluggable
- ☐ Improved safety
- ☐ Back up protection up to 160 A Fuse or 125 A MCB

► Specifications

Key characteristics	L-NL-PE/N-PE	
Protection mode	1-4	
Number of protected lines	I-II	
Test class	Yes	
Integrated thermal disconnector	Yes	
End of life indicator	Yes	
Safety reserve	Yes	
Safety reserve		
Electrical characteristics		
Nominal discharge current	/n (8/20)	kA 20
Maximal discharge current	/max (8/20)	kA 40
Impulse current	/imp (10/350)	kA 7
maximal continuous operating voltage	Uc	V 275/385/420
Type of current/frequency		Hz a.c.50/60
Voltage protection level at In	Up(L-PE)	kV 1,2
Voltage protection level at In	Up(L-N)	kV -
Voltage protection level at In	Up(N-PE)	kV -
Short circuit withstand	/SCOR	kA 100
Total current	/TOTAL	kA 20
Follow current interrupted	/fi	kA -/-
Ground residual current	/PE	μA <350
TOV withstand(L-N:5s/N-PE:200 ms)	UT	V 337
Voltage Combination Wave	Uoc	kV 20
Required thermal/back-up protection		
Curve B or C Circuit breaker		A <125
gG-gL fuse		A ≤160
Comments		
Mechanical characteristics		
Dimensions	HxWxD	mm 89 × 18 × 69
Wire range/Solid wire		mm ² 2,5...25
Wire range/Stranded wire		mm ² 12,5
Stripping length		mm Per 1
Packing quantities		piece
Miscellaneous characteristics		
Maximal altitude		m 2000
Weight		g 150
Response time		ns 25
Fire resistance according to UL 94		< V-0