

P series  
AC Power Supply System  
Surge Protective Devices  
(Type 2, 60kA)



→ Standards

EN 50164-1、IEC 62305、IEC 60364-5-53  
IEC 61643-1/GB 18802.1、GB 50057、GB 50343

→ Model description

X|X|X|X|X|X

Protection system:  
2P: single phase TNS system  
3P: TNC、TT system  
P+N: single phase TT system  
3P+N: TNS、TT system

Nominal voltage/Discharge current:  
24/20: 24VDC/20kA  
1200/40: 1200VDC/40kA  
385/40: 385VAC/40kA  
255/40: 255VAC/40kA  
385/60: 385VAC/60kA  
255/60: 255VAC/60kA  
385/100: 385VAC/100kA  
260/100: 260VAC/100kA  
260/25: 260VAC/25kA  
.....

Type: FL: lighting protection  
Series: P: P series SPD

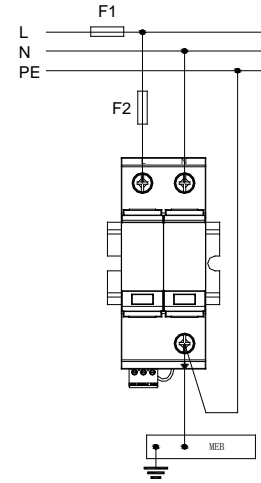
→ Features

- Strong resistance to surge
- Fault indication and remote alarm terminal
- Hot plugging, easy maintenance
- 35 mm rail installation

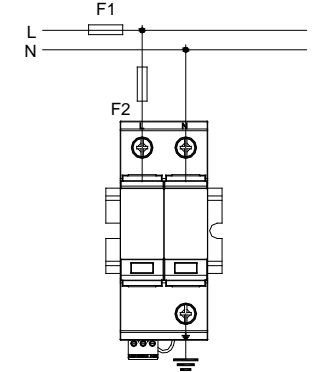
→ Specification

Parameter \ Type	P-FL-385/60×2P	P-FL-385/60×3P	P-FL-385/60×P+N	P-FL-385/60×3P+N
Nominal Voltage Un(AC)	230 V/400 V			
Max. continuous operating voltage Uc(AC)	385 V		385 V(L-N), 255 V(N-PE)	
Nominal discharge current In(8/20μs,C2)	30 kA			
Max. discharge current I <sub>max</sub> (8/20μs,C2)	60 kA			
Voltage protection level Up(8/20μs,C2)	≤2.0 kV		≤2.0 kV(L-N), ≤1.5 kV(N-PE)	
Voltage protection level Up @5kA	≤1.3 kV			
Backup fuse	≤125 A gL/gG			
Short-circuit withstand capacity I <sub>scwpv</sub>	25 kArms			
Response time T <sub>a</sub>	≤25 ns			
Working state/failure indicator	Green/Red			
Remote alarm terminal	Selection			
Temperature	-40~+80°C			
Installation	35 mm DIN rail			
Protection degree	IP20			
Material	PC, UL94 V-0			

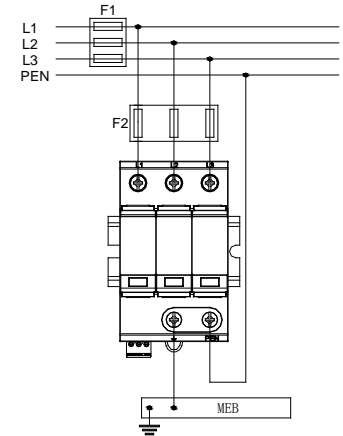
→ Connection Diagram



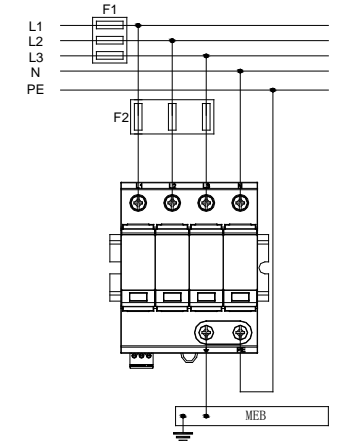
Single phase TN system



Single phase TT system

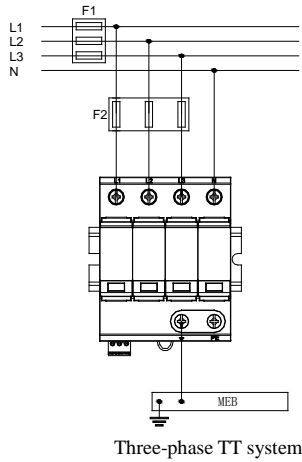


Three-phase TN-C system



Three-phase TN-S system

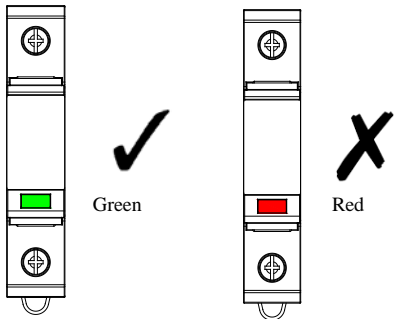
Nanjing New Power Electric Co., Ltd.



Three-phase TT system

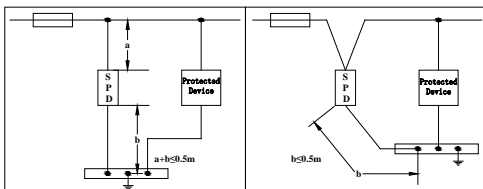
→ Fault Indication

When the indication is green, the product is all right. When the indication is red, the product is damaged, please replace it in time.

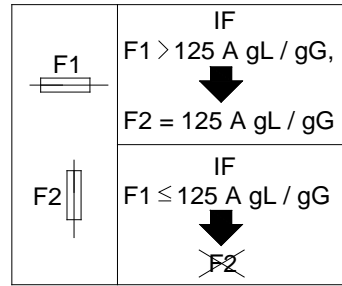


→ Wiring Instructions

Increasing the length of the connection wire of the SPD will reduce the overvoltage effect of the SPD, so keep the total length as long as possible less than 0.5 m.



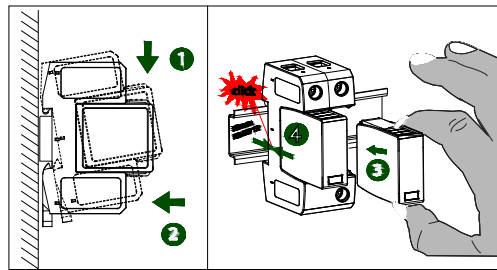
→ Backup Fuse



→ Installation

- The apparatus can be mounted on a DIN 35mm standard rail corresponding to EN 60715, they must be snapped onto the rail, and never slanted or tipped to the side.

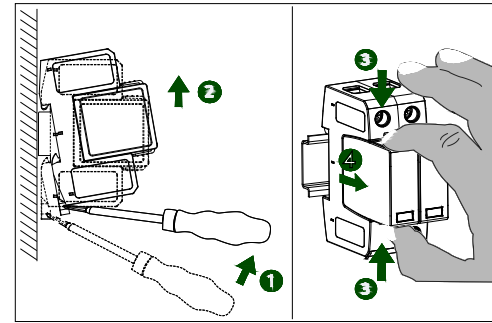
- Installation steps are as follows:



Installation

- a) When installing the SPD, as shown in arrows 1 and 2, make the bayonet locked into the guide rail, Press the spring pin slightly and make the SPD on the DIN guide rail.
- b) When installing the module, make the arrow on the module and the pedestal at the same side, aim at card slot, then pinch the module as shown in arrows 3 and push in. The sound of "Ka" slight means completion.

- Removing steps are as follows:

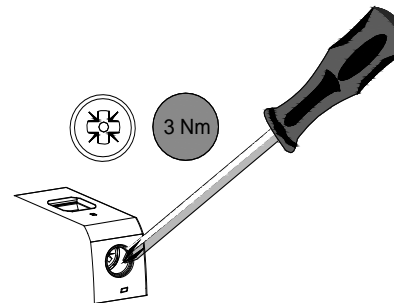


Removing

- a) When removing the SPD, as shown in arrows 1 and 2, screw the spring pin outward with the screwdriver, rotate the SPD and take off the SPD.
- b) When removing the module, as shown in arrows 3 and 4, pinch the side edge of the module as shown in the figure and pull out the module.

→ Connections

- Maximum torque of the screw 3 N.m;



- Wire size  $1.5 \text{ mm}^2 \sim 25 \text{ mm}^2$ .

**Min. 1.5 mm<sup>2</sup> ~ Max. 25 mm<sup>2</sup>**



→ Attentions

- The devices degree of protection is IP20 and must be protected from undesirable ambient conditions (water, small foreign objects). It is suitable for installed in control room or high density field cabinet, convenient for installation and

displacement.

- The devices were designed for use in pollution degree 2 and overvoltage category III as IEC/EN 60664-1. If used in areas with higher pollution degree, the devices need to be protected accordingly.
- Installation position shall not be affected by strong mechanical vibration, impact and electromagnetic induction from signal terminal and power supply, should conformity with the requirements on electromagnetic interference resistance of products in Class 3 industrial field atmosphere stipulated in IEC 61000-4, and the atmosphere shall be free from gases that are corrosive to metal and plastic components.
- Before installation, please check the surge protector is intact or not. If have any damage, it should not be installed.
- Only using the SPD according to this document, if more than the rated value, SPD and other device are likely to be damaged.

→ Supplements

- The apparatus must be installed, connected and adjusted by qualified personnel in non-hazardous area according with the instruction manual.
- If faults cannot be eliminated, the apparatus must be taken out of operation and protected from being placed in service again inadvertently. Devices must only be repaired directly by the manufacturer. Tampering with the apparatus is dangerous and therefore forbidden.
- The operator must strictly comply with the relevant local safety standards and guidelines.
- If there is any content difference between the specification and the website or sample, the instructions shall prevail. We reserve the rights to change or update the product information without prior noticing the users.