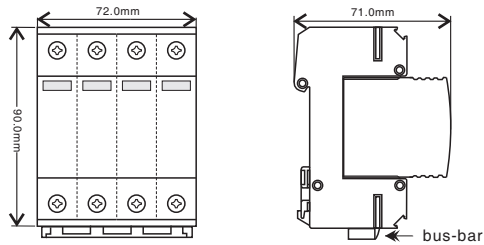


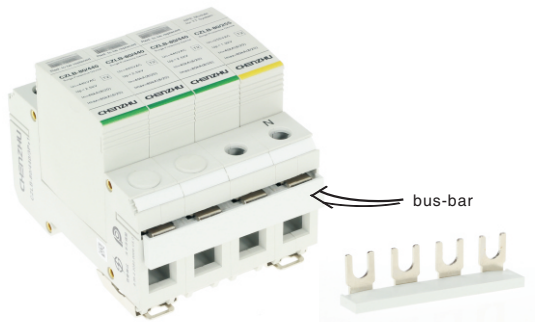
■ Dimension



A single module has a thickness of 18.0mm.

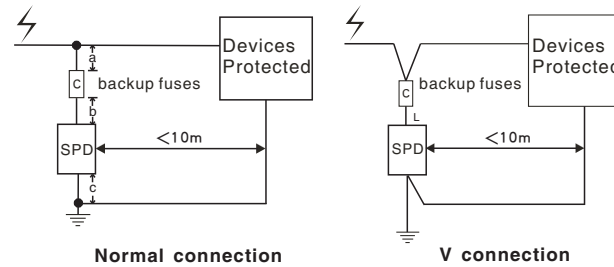
■ Installation

CZLB-80/440 Serie SPDs use a bus-bar to short terminal PE/N. Please insure the bus-bar is well connected before mounting (figure blow). While loosening or tightening the screws, hold the bus-bar in case it drops. If the bus-bar got lost, every piece of the module must be connected to PE/N separately.



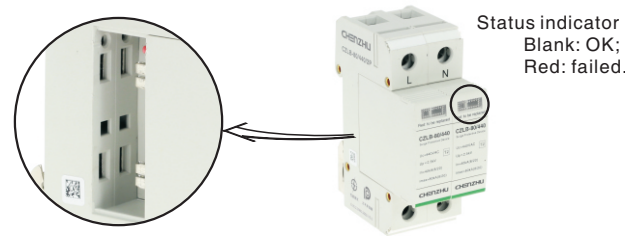
In case of the main circuit broken because of a failed SPD, a protection device such as fuse should be installed before the SPDs. Protection devices with a suitable nominal current should be selected according to the Parameter table. Corresponding cross sectional area of the cable for L/N and PE connection should also be selected according to the Parameter table.

When install SPDs, the connection cable should be as short as possible. As the diagrams shown below,  $L(L=a+b+c$  in normal connection) should be less than 0.5 meters. Cable between SPD and the protected device should be less than 10m. The housing of the protected device should be grounded via SPD terminals.



■ Maintenance

1. Check the status indicator. If the indicator is red, replace the SPD or the failed module.



Status indicator  
Blank: OK;  
Red: failed.

Failed modules can be replaced.

2. Check if the connections are correct and reliably fixed before powering on SPDs.
3. SPDs' quality are well controlled and strictly inspected before delivery. If non-functional ones are found during operation, please contact us early enough.
4. Within 5 years of delivery, any problems occurred during normal operations can get treatments free.

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<http://www.chenzhu-inst.com>

Surge Protective Device

CZLB-80/440 Series



Before using the product, please read this manual carefully and save it well.

⚠ Caution

- Please check whether the product type on the package accords to the ordering contract;
- Read this manual carefully before installation or use. If there is something unclear, you can dial our technic support hotline;
- Prevent friction, avoid electrostatic;
- Users are not allowed to dismantle or repair the SPD otherwise it will induce malfunction.

## General

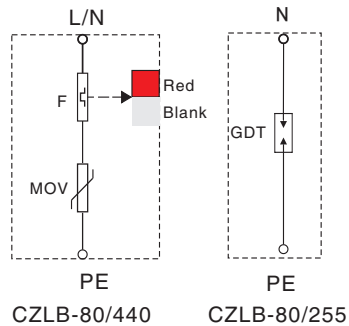
CZLB-80/440 series AC power supply SPDs are designed according to the domestic criterials. It enables the connection between the power supply system and an equipotential network instantaneously when the surge occurs and limit the residual voltage to a certain level to protect the devices protected.

## Main technical parameters

Parameter \ Type	CZLB-80/440	CZLB-80/255
Nominal operating voltage Un	220V AC	255V AC
Max. operating voltage Uc	440V AC	255V AC
Nominal discharge current In(8/20 μs)	40kA	40kA
Max. discharge current I <sub>max</sub> (8/20 μs)	80kA	80kA
Protection level Up(40kA, 8/20 μs)	2.2kV	1.2kV
Protection level Up(1kV/μs)	-	3.0kV
Response time	<25ns	<100ns
Leakage current	<20 μA	-
Status indication	Blank: Ok Red: failed	-
Max. back-up fuse	125A	-
Connection cable sectional area L/N	≥4mm <sup>2</sup>	≥4mm <sup>2</sup>
Connection cable sectional area PE	≥6mm <sup>2</sup>	≥6mm <sup>2</sup>

Operation temperature: -40°C-70°C  
 Relative humidity: 10%-90%  
 Housing protection level(IEC60529): IP 20  
 Housing material flame-retarded level(UI94): PA66/V0  
 Installation: Standard 35mm DIN rail  
 Testing standards: GB 18802.1/IEC 61643-1  
 Performance test: Shanghai Lightning Protection Center

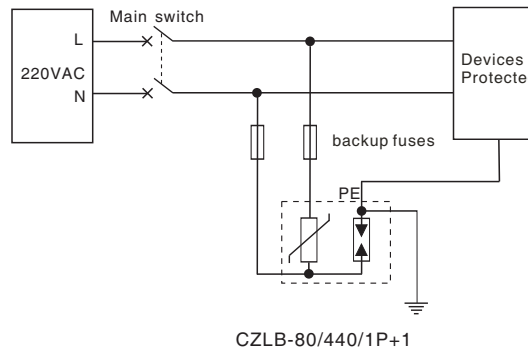
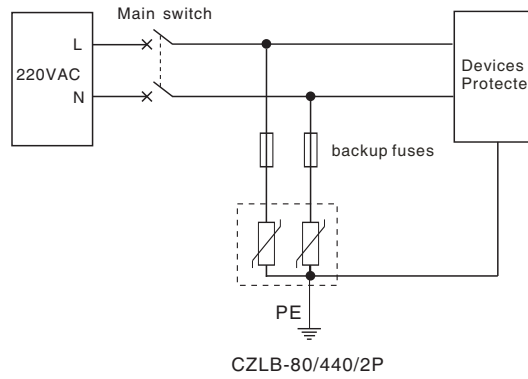
## Schematic diagram



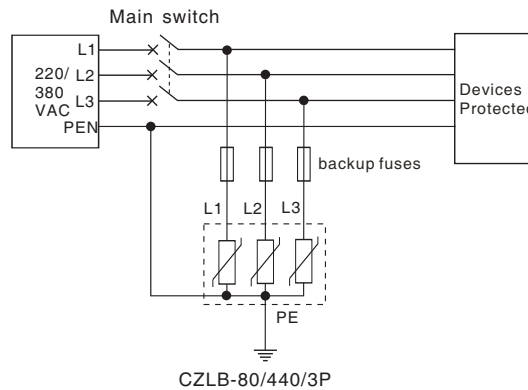
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## Typical applications

### Single phase system

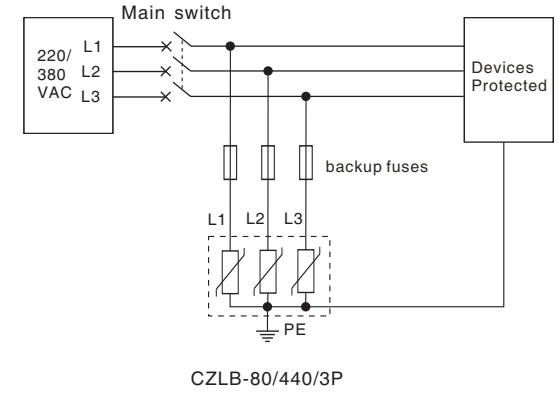


### TN-C system

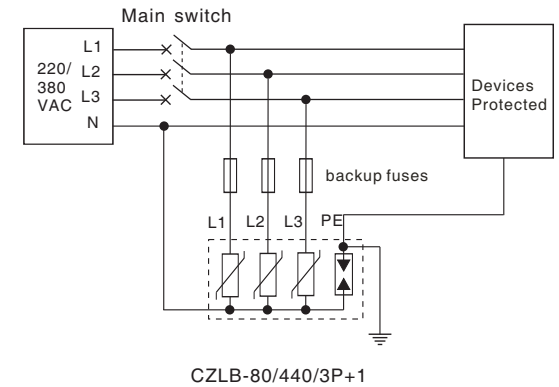


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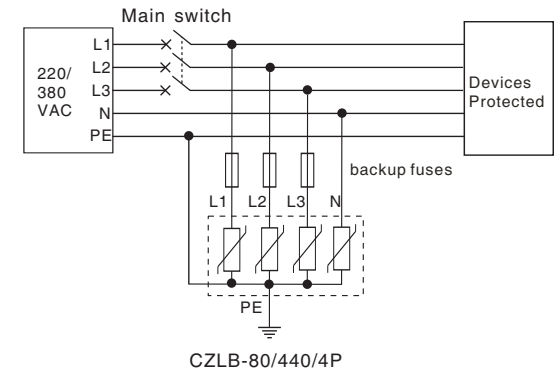
### IT system



### TT system



### TN-S system



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