中控·SUPCON 使用说明书

电涌保护器(SPD)

P-320-20-L2、P-320-20-L4
P-385-40-L2、P-385-40-L4
P-60-40-L2

使用产品前请仔细阅读本使用说明书，并请妥善保管

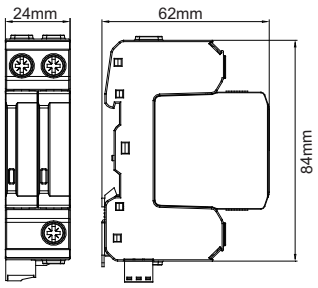
⚠ 注 意

- 请核对产品外包装，产品标签的型号、规格是否与订货合同一致；
- 本产品安装、使用前应仔细阅读本说明书，若有疑问，请与本公司联系；
- 严禁私自拆装仪表，防止仪表失效或发生故障。

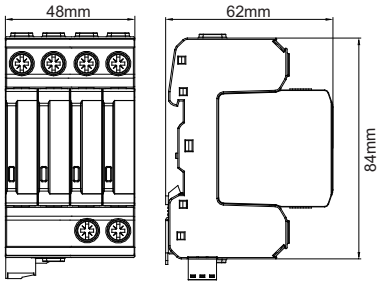
SISPD-PDCH-01C

外形尺寸

P-320-20-L2/P-385-40-L2/P-60-40-L2



P-320-20-L4/P-385-40-L4

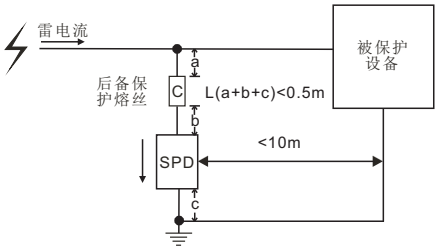


安装

应在SPD前串联过流保护装置（熔丝等），防止SPD老化短路造成供电回路跳闸，过流保护装置的额定电流请根据“主要技术参数”推荐值来选择。

SPD上引线（接L/N）应采用线径≥2.5mm² 的铜导线，下引线（接PE）应采用线径≥4mm² 的铜线。

为了使进入被保护设备的冲击残压最低，SPD安装时，连接导线应平直，且长度尽可能短。一般接线方式中，要求L（a+b+c）＜0.5m，如现场条件无法实现，应采用凯文接线方式(V形接线)。SPD与被保护的设备之间的距离应＜10m，被保护设备应通过SPD接地端接地。



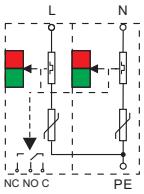
一般接线

概述

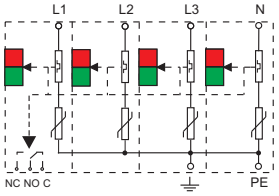
电源SPD依据IEC、GB等标准设计，能在电涌产生瞬间，将被保护线路接入等电位系统中，将电压限制在一定水平，起到保护用户用电设备的作用。支持热插拔且具备遥信功能。

电路原理图

P-60-40-L2
P-320-20-L2
P-385-40-L2



P-320-20-L4
P-385-40-L4

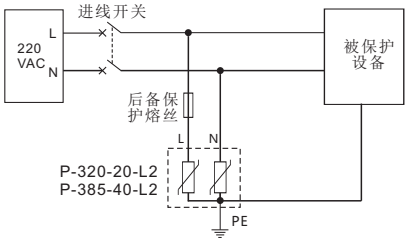


防雷认证

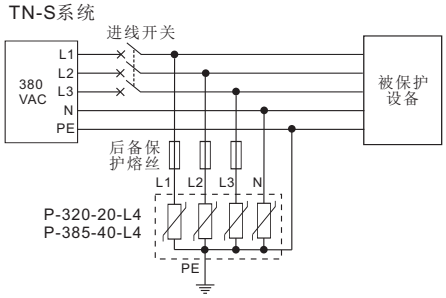
上海防雷测试中心产品防雷性能测试

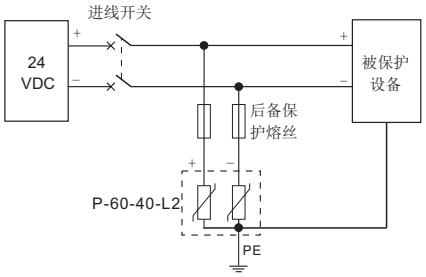
典型应用

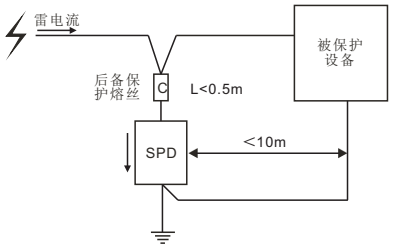
单相TN系统



TN-S系统







凯文接线

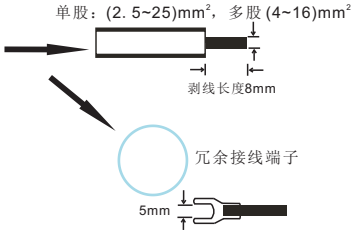
主要技术参数

技术参数 \ 规格型号	P-320-20-L2 P-320-20-L4	P-385-40-L2 P-385-40-L4	P-60-40-L2
额定工作电压Un	220V AC	220V AC	24V DC
最大工作电压Uc	320V AC	385V AC	90VDC/60VAC
标称放电电流 In(8/20μs)	10kA	20kA	20kA
最大放电电流 Imax(8/20μs)	20kA	40kA	40kA
电压保护水平Up	＜1.2kV	＜1.2kV	＜600V
响应时间	＜25ns	＜25ns	＜25ns
漏电流	＜20μA	＜20μA	＜10μA
最大后备保护熔丝	40A gG	80A gG	80A gG
短路耐受I_{SCCR} (无外部脱离装置)	1000A	1000A	1000A
遥信接口	250VAC/0.5A 24VDC/0.5A	250VAC/0.5A 24VDC/0.5A	250VAC/0.5A 24VDC/0.5A
接线线径 (单股/多股)	(4-25)mm² (4-16)mm²	(4-25)mm² (4-16)mm²	(4-25)mm² (4-16)mm²

工作状态指示：	绿色：正常 红色：失效
工作温度：	-40℃ ~+70℃
相对湿度：	5% ~ 95%
外壳防护等级（IEC60529）：	IP 20
外壳材料/阻燃等级（UL94）：	PA66/V0
安装：	DIN35mm标准导轨
测试标准：	GB/T18802.1/IEC61643-11

接线

1、上引线、下引线接线端子可连接横截面积(2.5~25)mm²的单股导线或(4~16)mm²的多股导线。
2、冗余接线端子可通过孔径为5mm的U形冷压端子进行接线。
3、遥信接线端子可连接截面积≤1.5mm²的多股或单股铜导线。



维护

1、检查SPD的状态指示窗口，若非全绿，则需更换SPD或者失效的电涌防护模块。
2、产品出厂前经过严格检验和质量控制，如发现异常情况，请及时与本公司联系。

环保声明

产品中有害物质的名称及含量

部件名称	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
外壳和端子	×	○	○	○	○	○
电路板	×	○	○	○	○	○

本表格依据SJ/T 11364的规定编制。
○：表示该有害物质在该部件所有均质材料中的含量均在GB/T 26572标准规定的限量要求以下。
×：表示该有害物质至少在该部件的某一均质材料中含量超出GB/T 26572标准规定的限量要求，且目前业界没有其他成熟替代方案，有害物质浓度在RoHS指令豁免条款要求范围内，符合欧盟RoHS指令环保要求。

10：本标识中的数字表示产品在正常使用状态下环保使用期限为10年。

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SUPCON | User Manual

Surge Protective Device

P-320-20-L2、P-320-20-L4
P-385-40-L2、P-385-40-L4
P-60-40-L2

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

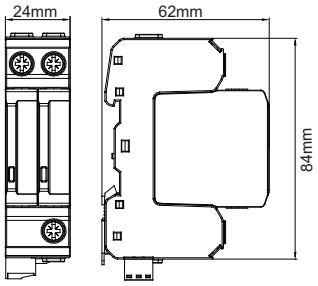
⚠ Caution

- Please check whether the product type on the package accords to the ordering contract.
- Read this manual carefully before installation. If there is any questions ,contact us early enough.
- Disassembling or repairing SPDs are not allowed or it will cause malfunction.

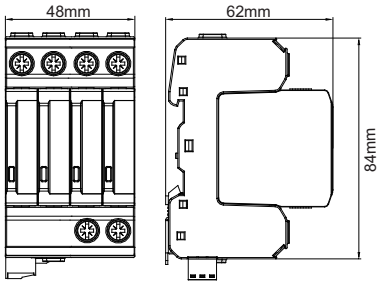
SISPD-PDCH-01C

Dimensions

P-320-20-L2/P-385-40-L2/P-60-40-L2

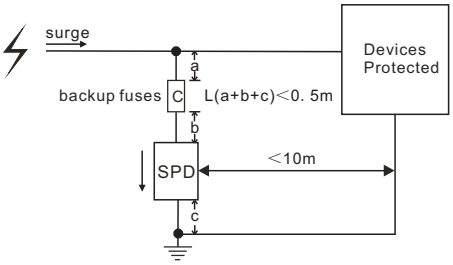


P-320-20-L4/P-385-40-L4

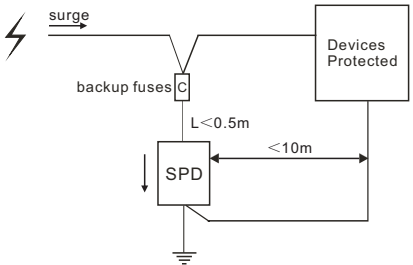


Maintenance

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.
The upper lead (connected to L/N) of the SPD should be a copper wire with a diameter of at least 2.5mm², and the lower lead (connected to PE) should be a copper wire with a diameter of at least 4mm².
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.



Normal connection



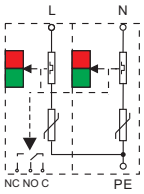
Kevin connection

General

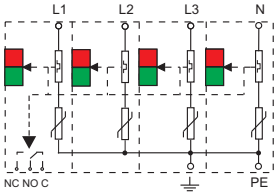
The power supply SPDs are designed according to the IEC and GB standards. It connects the protected circuit to an equipotential surface instantaneously when the surge occurs, and limits the residual voltage to a certain level to protect the devices. Supports hot swap and remote communication.

Schematic diagram

P-60-40-L2
P-320-20-L2
P-385-40-L2



P-320-20-L2
P-385-40-L2

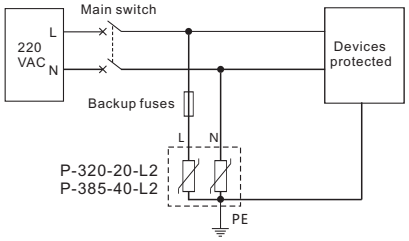


Lighting Protection Certification

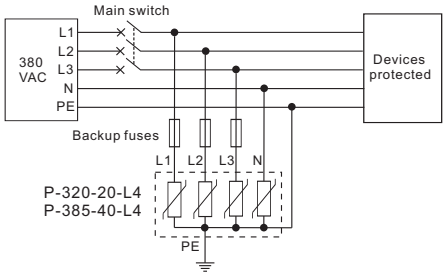
Shanghai lighting protection center

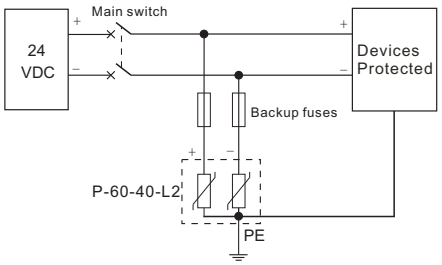
Typical applications

Single phase TN



TN-S systems





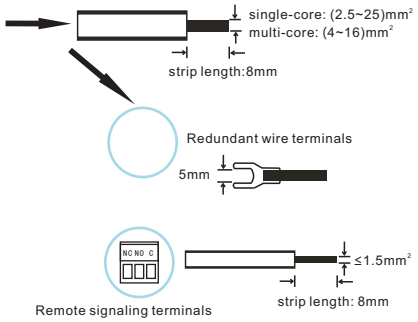
Main technical parameters

Parameter \ Type	P-320-20-L2 P-320-20-L4	P-385-40-L2 P-385-40-L4	P-60-40-L2
Nominal operating voltage Un	220V AC	220V AC	24V DC
Max. operating voltage Uc	320V AC	385V AC	90VDC/60VAC
Nominal discharge current In(8/20μs)	10kA	20kA	20kA
Max. discharge current Imax(8/20μs)	20kA	40kA	40kA
Protection level Up	<1.2kV	<1.7kV	<600V
Response time	<25ns	<25ns	<25ns
Leakage current	<20μA	<20μA	<10μA
Over current protection	40A gG	80A gG	80A gG
Short circuit tolerance I_{SCCR} (No external disengagement device)	1000A	1000A	1000A
Remote communication interface	250VAC/0.5A 24VDC/0.5A	250VAC/0.5A 24VDC/0.5A	250VAC/0.5A 24VDC/0.5A
Connection wire diameter(Single strand wire/Multipel strand line)	(4-25)mm² (4-16)mm²	(4-25)mm² (4-16)mm²	(4-25)mm² (4-16)mm²

Status indication:	Green:OK Red:Failed
Working temperature:	-40℃ ~ +70℃
Relative humidity:	5% ~ 95%
Housing protection level(IEC60529):	IP 20
Housing material flame-retarded level(UL94):	PA66/V0
Installation:	Standard 35mm DIN rail
Testing standards:	GB 18802.1/IEC 61643-1

Wiring

1. The upper and lower wire terminals can be connected to single-core conductors with a cross-sectional area of (2.5~25)mm² or multi-core conductors with a cross-sectional area of (4~16)mm².
2. Redundant wire terminals can be wired through U-shaped cold-pressed terminals with a diameter of 5mm.
3. The remote signaling terminals can be connected to multi-strand or single-strand copper wires with a cross-sectional area of ≤1.5mm².



Maintenance

1. Check if the connections are correct and tight before powering on SPD.
2. SPD's quality is well controlled and strictly inspected before delivery. If non-functional ones are found during operation, please contact us early enough.

Environmental Declaration

Name and content of harmful substances

Part Name	Harmful Substance					
	Pb	Hg	Cd	Cr6+	PBB	PBDE
Housing and terminals	×	○	○	○	○	○
Circuit board	×	○	○	○	○	○

This form is prepared in accordance with the provisions of SJ / T11364.
○ : Indicates that said hazardous substance contained in all of the homogeneous materials for this part is below the limit requiremnet of GB / T 26572.
× : Indicates that said hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requiremnet of GB / T 26572 and there is currently no mature alternative method in the industry. The concentration of hazardous substances is within the RoHS directive exemption clauses range, which meets the eco-friendly requirements of the EU RoHS directive.

10 : The number in this logo indicates that the product has an environmental protection period 10 years under normal use.

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