TH-2024-V1.0



FOR MORE INFORMATION, PLEASE VISIT:

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Products are subject to the product manual. XIAMEN TAIHANG has the right of final interpretation.



Promov®

Low Voltage Distribution

Lightning Protection Devices

TAIHANG GUARANTEES SAFETY

TAIHANG GUARANTEES SAFETY

Founded in 2004, XIAMEN TAIHANG TECHNOLOGY CO., LTD is the manufacturer of lightning protection device, lightning protection related system and EMC protection with more than 1100 square meters China national CNAS laboratory. SPD specified disconnector developed by XIAMEN TAIHANG TECHNOLOGY has affected some national and industry standard amendment and gained Second prize of science and technology of China communications association. Cooperating with SINOPEC Safety and engineering institute, XIAMEN TAIHANG TECHNOLOGY set up "Lightning warning joint R&D center" and undertakes lightning warning system construction and R&D work for lightning warning in Military. Lightning warning system and smart lightning protection system developed by XIAMEN TAIHANG has achieved safety, datamation and network to provide high quality of lightning protection for construction electrical, rail transportation, airport, military, petrifaction ect.





Lightning protection: safety, datamation and network of lightning protection system products provide lightning protection, EMC protection, lightning warning, lightning information record for petrifaction, high speed train, telecommunication, national defense etc. As far, Taihang has 15 invention patents and 29 utility model patent. High R&D team is composed of talents from computer software develop, SCM application, telecommunication technology, lightning protection technology, EMC protection, mechanical technology. Meanwhile, XIAMEN TAIHANG has formed deep technical cooperation with Tongji university and Nanjing Information Engineering University, which is also the guarantee of High product R&D and technology innovation capability.

Electrical: Many industrial-grade standard AC/DC PDUs (Power Distribution Units) manufactured by Taihang Electrical Division rank the first in the same line with the electric parameters such as high insulation level, reversed insertion force control, overload temperature rising, and durability, providing the supporting services for the equipment cabinet manufacturers in IT industry both at home and abroad.

Electric: The industrial-grade SCR high-speed switches for power factor correction and automatic reclosers for miniature circuit breakers manufactured by Taihang Electric Division, with the high performance cost, provide supporting services for the foreign customers from Malaysia, Germany, Turkey and Russia, etc.

Appliance: The desktop with the function of testing data printing and portable multi-function lightning protection elements testers produced by Taihang Instrument Division, have been used in the domestic military, lightning protection testing center of meteorological system and lightning protection elements manufacturers.



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SPD & SSD Matching

T1 Class Power SPD Model Definition

VA150B	F	R	385	/	3PN
Product Series No.	**Usage Type:**	**Remote Signal Contact**	**Max.continuous Operating Voltage(Uc)**		**Pole Number**
VA150	Normal type - no remark	Normal type: without Remote Signal	275、440		1PN、3P、3PN
VA150A VA150B	Normal type - no remark T: Railway F: Wind power	Normal type: without Remote Signal R: with Remote Signal	385、690		1PN、1P1、3P 3PN、3P1

T2 Class Power SPD Model Definition

VA	60	F	R	385	/	3PN
Product Series No.	**Nominal Discharge CurrentIn(kA)**	**Usage Type:**	**Remote Signal Contact**	**Max.continuous Operating Voltage(Uc)**		**Pole Number**
VA VB VC VD	60: VA 40: VB 20: VC 10: VD	Normal type - no remark T: Railway D: DC F: Wind power	Normal type: without Remote Signal R: with Remote Signal	AC: 150、275、320、385、440、690 DC: 18、38、85、170、350、500、790、1200、1300		1PN、1P1、3P、 3PN、3P1

Low Voltage SPD Specific Disconnector(SSD) Model Definition

T08	R	/	100B	1	/	4P
Product Series No.	**Remote Signal Contact**		**Mpulse Discharge Current(limp) / Max. Discharge Current (Imax):**	**Rated short circuit breaking capability(Ics):**		**极数**
T08	Normal type: without Remote Signal R: with Remote Signal		100B: 15kA(10/350μs) 60E: 60kA(8/20μs) 100E: 25kA(10/350μs) 40E: 40kA(8/20μs) 80E: 80kA(8/20μs) 20E: 20kA(8/20μs)	No Remark: 1: 65kA 2: 100kA		1P、2P 3P、4P

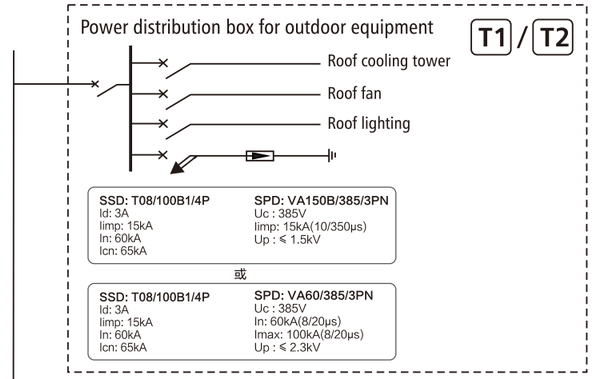
SPD & SSD Matching

	T1	T2	T2	T2 / T3	T2 / T3
	Main power distribution cabinet (Roof equipment and outdoor equipment with leading-out wires)	Roof equipment without leading-out wires	Floor power distribution cabinet /elevator network for fire control	Terminal box/control box for large equipment	Front cabinet of important equipment UPS/camera
SCB	T08/100E1/4P	T08/80E1/4P	T08/80E1/4P	three phase: T08/60E1/4P single phase: T08/60E1/2P	three phase: T08/60E1/4P single phase: T08/60E1/2P
SPD	VA150/440/3PN	VA60/385/3PN	VB40/385/3PN	three phase: VC20/385/3PN single phase: VC20/385/1PN	three phase: VD10/320/3PN single phase: VD10/320/1PN

Note : 1) It takes TN-S earthing system as example the selecting above products, please refer to TN-C-S system for other earthing systems.
3P products shall be selected for the first level protection SPD.
2) The tripping current of power frequency threshold for different SPD tripping unit (SSD) models is the same.

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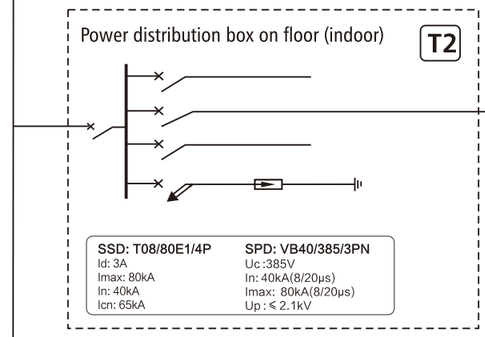
SPD & SSD Matching
Distribution System Instruction



Class A shall be selected for outdoor power distribution box:
SPD selection: VA150B/385/3PN;
SSD selection: T08/100B1/4P

If all power wires here are good shielded (passing through metal pipe and well grounded), ClassB can be selected.
SPD selection: VA60/385/3PN SSD selection: T08/100B1/4P

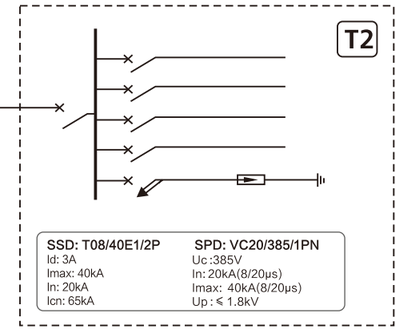
（The number selected for three-phase TN-S is 4pcs and 3pcs for three-phase TN-C）



ClassB should be selected for floor power distribution box.

Three-phase:
SPD selection: VB40/385/3PN
SSD selection: T08/80E1/4P

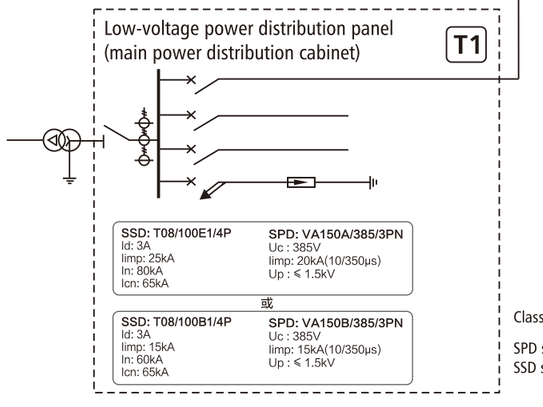
Single-phase:
SPD selection: VB40/385/1PN
SSD selection: T08/80E1/2P



For the equipments with low impulse withstand voltage (such as electronic information equipments in computer room), ClassB or ClassC should be additionally installed in the special power distribution box.

Three-phase:
SPD selection: VC20/385/3PN
SSD selection: T08/60E1/4P

Single-phase:
SPD selection: VC20/385/1PN
SSD selection: T08/60E1/2P



ClassA shall be selected at the wiring-in point of power lines in building

SPD selection: VA150A/385/3PN
SSD selection: T08/100E1/4P

Remarks: above product select is based on TN-S power supply system. The specifications of SSD is recommended by TAIHANG

VA150
Surge Protective Device

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VA150
Surge Protective Device

- ▶ High-energy core component, no follow current;
- ▶ Integrated structure;
- ▶ Anti-dust, anti-corrosion and flame retardant;

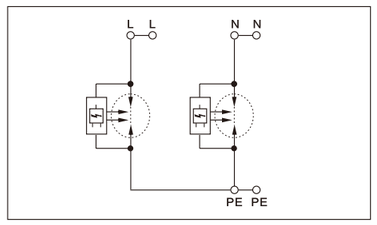




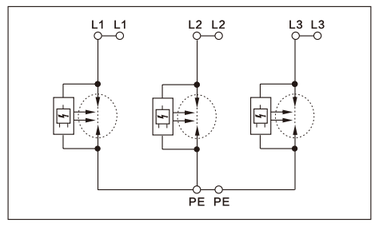


Type I+Type II Protection

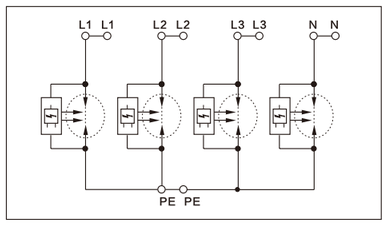
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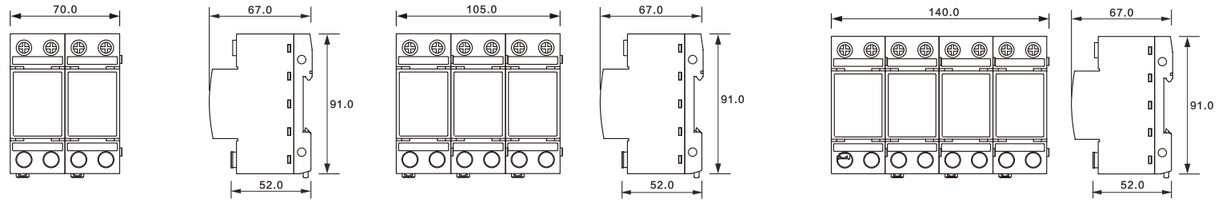


3P



3PN





Electrical Specifications		
Model	VA150/275	VA150/440
Max. Continuous Operating Voltage **Uc**	275V	440V
Nominal Discharge Current (8/20μs) **In**	50kA	50kA
Impulse Current (10/350μs) **Iimp**	50kA	50kA
Voltage Protection Level **Up**	⩽2.3kV	⩽2.3kV
Response Time **TA**	＜100ns	＜100ns
Common Specifications		
In Accordance with IEC61643-11	Type I	Type I
Operating Temperature Range **Tu**	-40°C～80°C	-40°C～80°C
Wiring	Phase: 6～25mm² Ground Wire：10～25mm²	Phase: 6～25mm² Ground Wire：10～25mm²
Enclosure Protection Level	IP20	IP20
Screw Torque	2.5N.m	2.5N.m
Rail Type	35mm DIN rail EN 60715	35mm DIN rail EN 60715

TH-F25A
Surge Protective Device

- ▶ High-energy core component, no follow current;
- ▶ Integrated structure;
- ▶ Anti-dust, anti-corrosion and flame retardant;

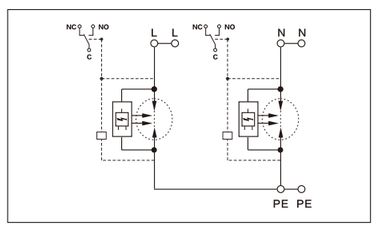
Type I+Type II Protection



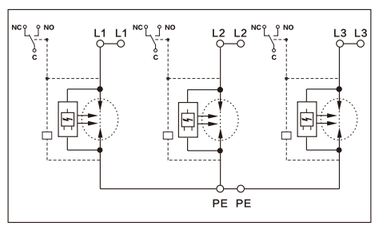




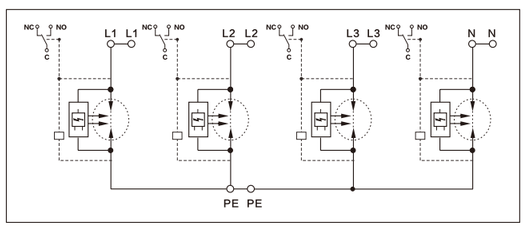
2P

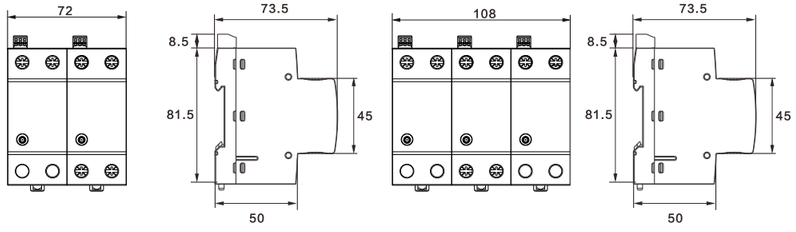


3P



4P





Electrical Specifications	
Model	TH-F25A-440
Max. Continuous Operating Voltage **Uc**	440V
Nominal Discharge Current (8/20μs) **In**	50kA
Impulse Current (10/350μs) **Iimp**	25kA
Voltage Protection Level **Up**	⩽2.3kV
Response Time **TA**	＜100ns

Common Specifications	
In Accordance with IEC61643-11	Type I
Operating Temperature Range **Tu**	-40°C～80°C
Wiring	Phase: 6～25mm² Ground Wire：10～25mm²
Enclosure Protection Level	IP20
Screw Torque	2.5N.m
Rail Type	35mm DIN rail EN 60715

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TH-F25A
Surge Protective Device

VA150B
Surge Protective Device

Promov®

VA150B
Surge Protective Device

- ▶ High-energy capacity zinc oxide varistor - high discharge current capacity;
- ▶ Fast respond capability;
- ▶ Integrated structure;
- ▶ Red flag failure indication;
- ▶ Thermal controlled overheated tripping mechanism, link to red flag indicator.

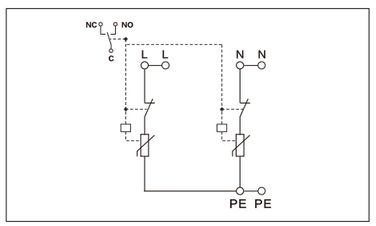


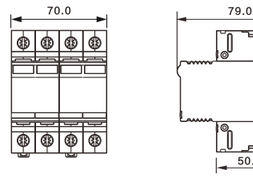




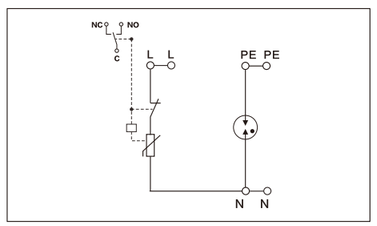
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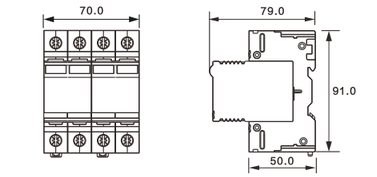
1PN



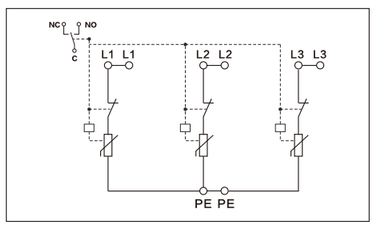


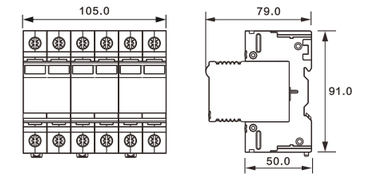
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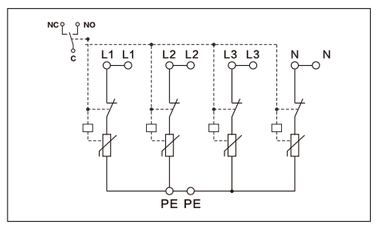


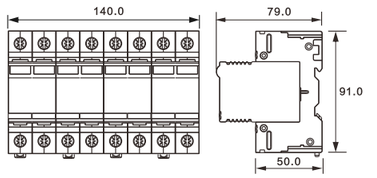
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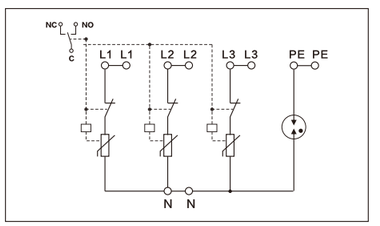


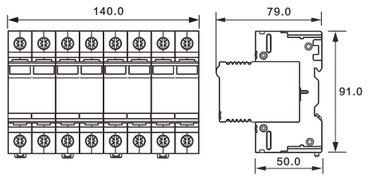
3PN





3P1





Electrical Specifications		
Model	VA150B/385	
Max. Continuous Operating Voltage **Uc**	385V	
Nominal Discharge Current (8/20μs) **In**	60kA	
Impulse Current (10/350μs) **Iimp**	20kA	
Voltage Protection Level **Up**	⩽1.5kV	
Response Time **TA**	＜25ns	

Common Specifications		
In Accordance with IEC61643-11	Type I+II	
Operating Temperature Range **Tu**	-40°C～80°C	
Wiring	Phase: 6～25mm² Ground Wire：10～25mm²	
Enclosure Protection Level	IP20	
Screw Torque	2.5N.m	
Rail Type	35mm DIN rail EN 60715	

VA60
Surge Protective Device

VA60
Surge Protective Device

- High-energy capacity zinc oxide varistor - high discharge current capacity;
- Fast respond capability;
- Integrated structure;
- Red flag failure indication;
- Thermal controlled overheated tripping mechanism, link to red flag indicator.

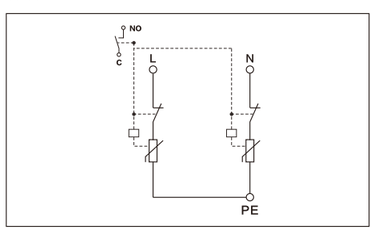


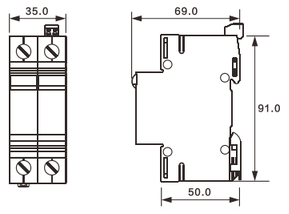




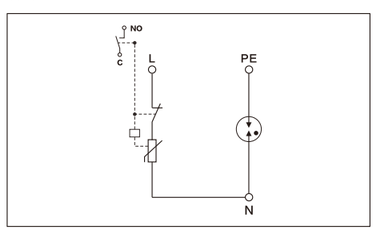
Type I+Type II Protection

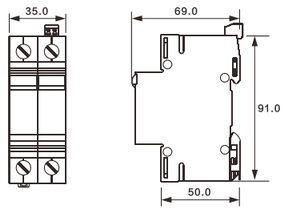
1PN



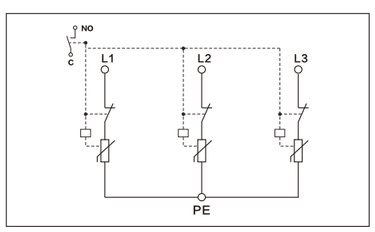


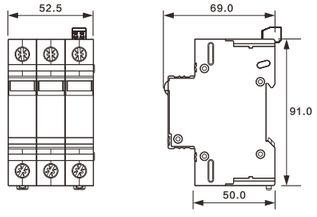
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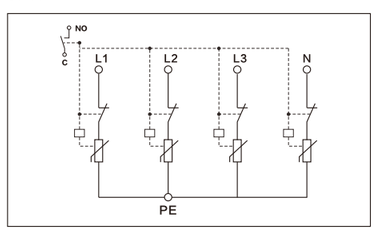


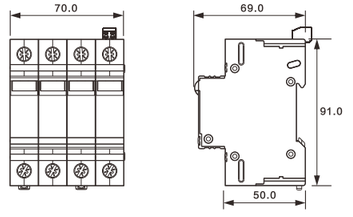
3P



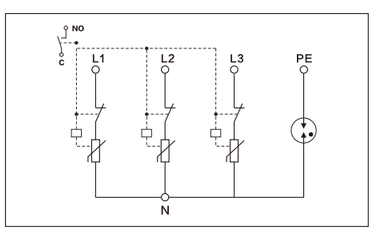


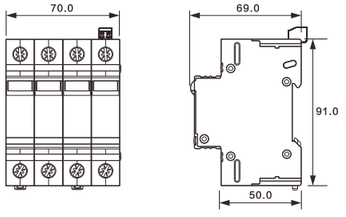
3PN





3P1





Electrical Specifications		
Model	VA60/275	VA60/385
Max. Continuous Operating Voltage **Uc**	275V	385V
Nominal Discharge Current (8/20μs) **In**	60kA	60kA
Maximum Discharge Current (8/20μs) **Imax**	100kA	100kA
Impulse Current (10/350μs) **Iimp**	8kA	8kA
5kA Limiting Voltage **Ur**	⩽1kV	⩽1.2kV
Voltage Protection Level **Up**	⩽2.1kV	⩽2.3kV
Response Time **TA**	＜25ns	＜25ns

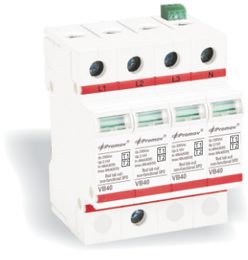
Common Specifications		
In Accordance with IEC61643-11	Class I + Class II	Class I + Class II
Operating Temperature Range **Tu**	-40°C～80°C	-40°C～80°C
TOV fault voltage **UT**	205V/5 sec	205V/5 sec
Wiring	Phase: 4～25mm² Ground Wire: 6~25mm²	Phase: 4～25mm² Ground Wire: 6~25mm²
Enclosure Protection Level	IP20	IP20
Max. Current In Remote Signal Contact	AC: 0.2A/125V DC: 0.5A/48V	AC: 0.2A/125V DC: 0.5A/48V
Screw Torque	2.5N.m/0.4N.m	2.5N.m/0.4N.m
Rail Type	35mm DIN rail EN 60715	35mm DIN rail EN 60715

VB40
Surge Protective Device

VB40
Surge Protective Device

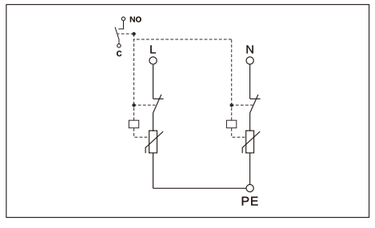
- High-energy capacity zinc oxide varistor - high discharge current capacity;
- Fast respond capability;
- Integrated structure;
- Red flag failure indication;
- Thermal controlled overheated tripping mechanism, link to red flag indicator.

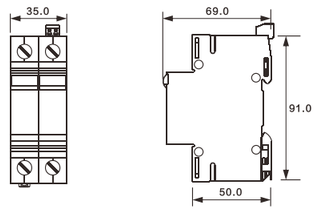


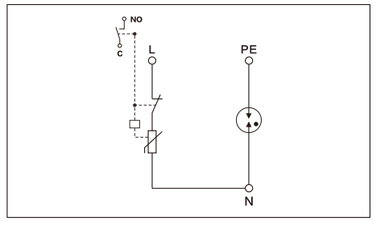

Type I+Type II Protection

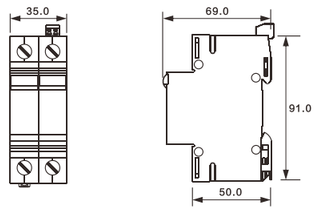
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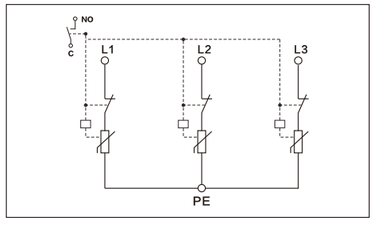


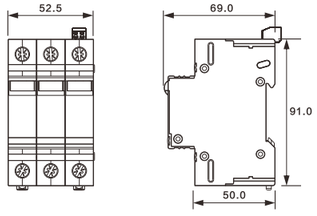
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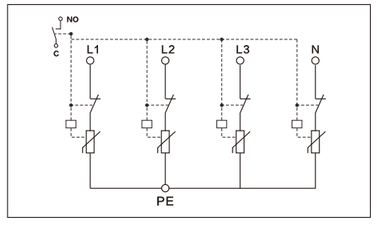


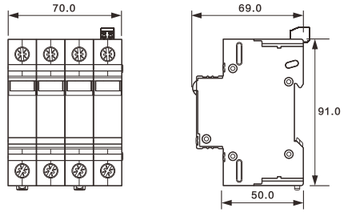
3P



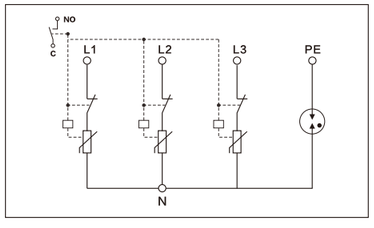


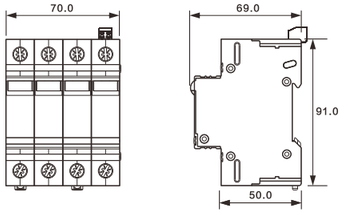
3PN





3P1





Electrical Specifications					
Model	VB40/150	VB40/275	VB40/320	VB40/385	VB40/440
Max. Continuous Operating Voltage **Uc**	150V	385V	320V	385V	440V
Nominal Discharge Current (8/20μs) **In**	40kA	40kA	40kA	40kA	40kA
Maximum Discharge Current (8/20μs) **Imax**	80kA	80k	80kA	80kA	80kA
Impulse Current (10/350μs) **Iimp**	4kA	4kA	4kA	4kA	4kA
5kA Limiting Voltage **Ur**	⩽0.9kV	⩽1kV	⩽1.1kV	⩽1.15kV	⩽1.25kV
Voltage Protection Level **Up**	⩽1.3kV	⩽1.8kV	⩽2kV	⩽1.9kV	⩽2.2kV
Response Time **TA**	＜25ns	＜25ns	＜25ns	＜25ns	＜25ns
Common Specifications					
In Accordance with IEC61643-11	Class I+Class II	Class I+Class II	Class I+Class II	Class I+Class II	Class I+Class II
Operating Temperature Range **Tu**	-40°C～80°C	-40°C～80°C	-40°C～80°C	-40°C～80°C	-40°C～80°C
TOV fault voltage **UT**	/	205V/5 sec	470V/5 sec	470V/5 sec	470V/5 sec
Wiring	Phase: 4~25mm² Ground Wire: 6~25mm²	Phase: 4~25mm² Ground Wire: 6~25mm²	Phase: 4~25mm² Ground Wire: 6~25mm²	Phase: 4~25mm² Ground Wire: 6~25mm²	Phase: 4~25mm² Ground Wire: 6~25mm²
Enclosure Protection Level	IP20	IP20	IP20	IP20	IP20
Max. Current In Remote Signal Contact	AC: 0.2A/125V DC: 0.5A/48V	AC: 0.2A/125V DC: 0.5A/48V	AC: 0.2A/125V DC: 0.5A/48V	AC: 0.2A/125V DC: 0.5A/48V	AC: 0.2A/125V DC: 0.5A/48V
Screw Torque	2.5N.m/0.4N.m	2.5N.m/0.4N.m	2.5N.m/0.4N.m	2.5N.m/0.4N.m	2.5N.m/0.4N.m
Rail Type	35mm DIN rail EN 60715	35mm DIN rail EN 60715	35mm DIN rail EN 60715	35mm DIN rail EN 60715	35mm DIN rail EN 60715

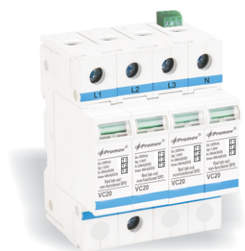
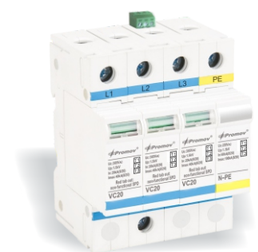
VC20
Surge Protective Device

VC20
Surge Protective Device

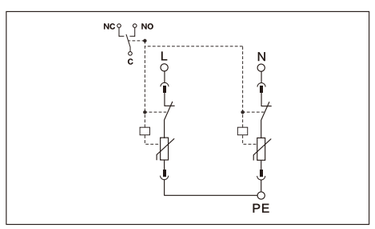
- Protects electrical and electronic equipment's from transient overvoltage;
- Installed in main switchboard, Distribution Board and other power distribution systems;
- Consists of two parts: base and small pluggable box;
- Thermal controlled overheated tripping mechanism, link to red flag indicator.

Type I+Type II+Type III Protection

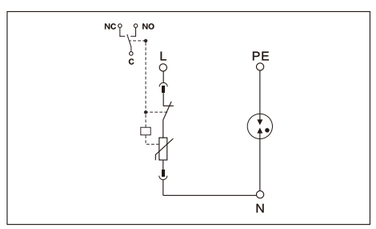


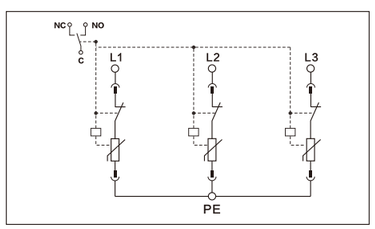
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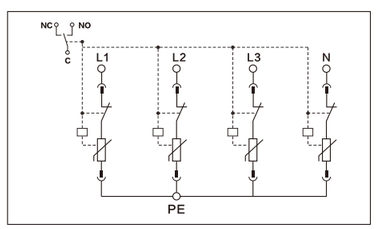
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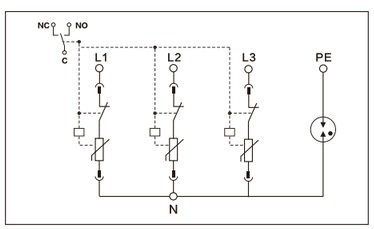
3P

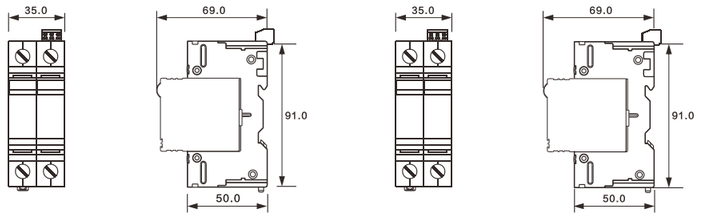


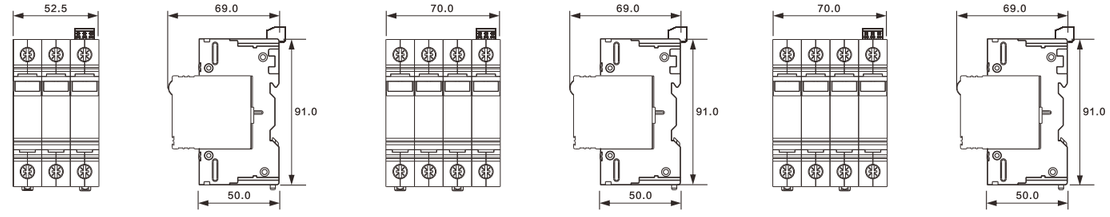
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3P1







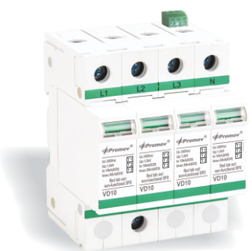
Electrical Specifications					
Model	VC20/150	VC20/275	VC20/320	VC20/385	VC20/440
Max. Continuous Operating Voltage **Uc**	150V	275V	320V	385V	440V
Nominal Discharge Current (8/20μs) **In**	20kA	20kA	20kA	20kA	20kA
Maximum Discharge Current (8/20μs) **Imax**	40kA	40kA	40kA	40kA	40kA
T3 Composite Voltage Wave Test (6kV) **Voc**	3kA	3kA	3kA	3kA	3kA
Impulse Current (10/350μs) **Iimp**	2kA	2kA	2kA	2kA	2kA
5kA Limiting Voltage **Ur**	⩽0.7kV	⩽0.8kV	⩽0.9kV	⩽1.1kV	⩽1.2kV
Voltage Protection Level **Up**	⩽1.0kV	⩽1.5kV	⩽1.6kV	⩽1.8kV	⩽2.0kV
Response Time **TA**	＜25ns	＜25ns	＜25ns	＜25ns	＜25ns
Common Specifications					
In Accordance with IEC61643-11	Class I+Class II	Class I+Class II	Class I+Class II	Class I+Class II	Class I+Class II
Operating Temperature Range **Tu**	-40°C～80°C	-40°C～80°C	-40°C～80°C	-40°C～80°C	-40°C～80°C
TOV fault voltage **UT**	/	205V/5 sec	470V/5 sec	470V/5 sec	470V/5 sec
Wiring	Phase: 2.5～25mm² Ground Wire: 4～25mm²	Phase: 2.5～25mm² Ground Wire: 4～25mm²	Phase: 2.5～25mm² Ground Wire: 4～25mm²	Phase: 2.5～25mm² Ground Wire: 4～25mm²	Phase: 2.5～25mm² Ground Wire: 4～25mm²
Enclosure Protection Level	IP20	IP20	IP20	IP20	IP20
Max. Current In Remote Signal Contact	AC: 0.2A/125V DC: 0.5A/48V	AC: 0.2A/125V DC: 0.5A/48V	AC: 0.2A/125V DC: 0.5A/48V	AC: 0.2A/125V DC: 0.5A/48V	AC: 0.2A/125V DC: 0.5A/48V
Screw Torque	2.5N.m/0.4N.m	2.5N.m/0.4N.m	2.5N.m/0.4N.m	2.5N.m/0.4N.m	2.5N.m/0.4N.m
Rail Type	35mm DIN rail EN 60715	35mm DIN rail EN 60715	35mm DIN rail EN 60715	35mm DIN rail EN 60715	35mm DIN rail EN 60715

VD10
Surge Protective Device

VD10
Surge Protective Device

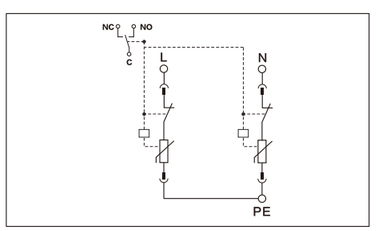
- Ultimate surge protection device for DC power distribution system;
- Installed in parallel to incoming mains;
- Protects from transient overvoltage on mains supply;
- Consists of two parts: base and small pluggable box;
- Thermal controlled overheated tripping mechanism, link to red flag indicator.

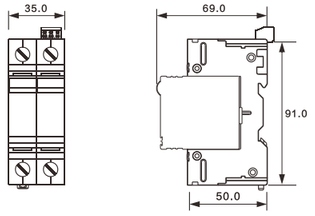


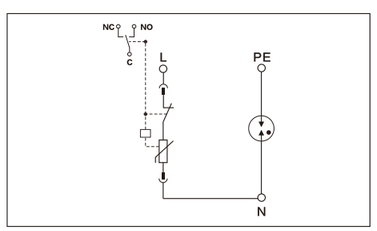

Type I+Type II+Type III Protection

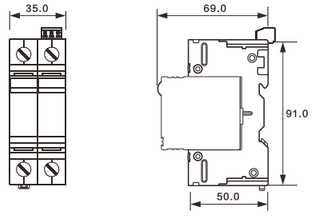
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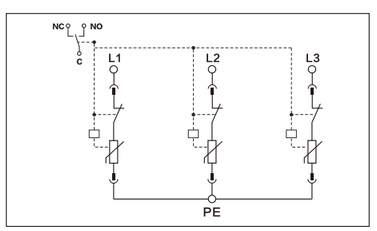


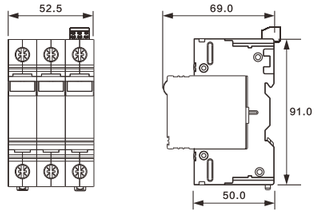
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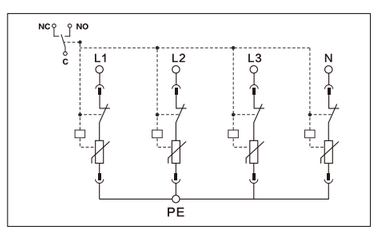


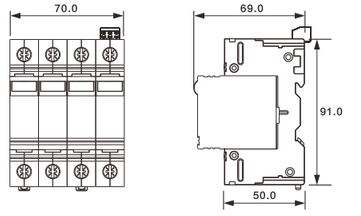
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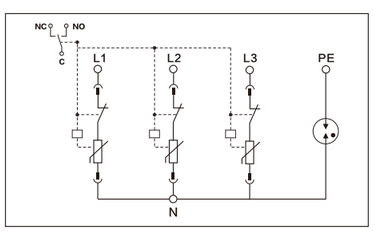


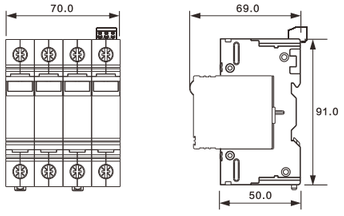
3PN





3P1



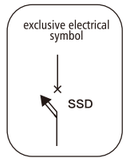


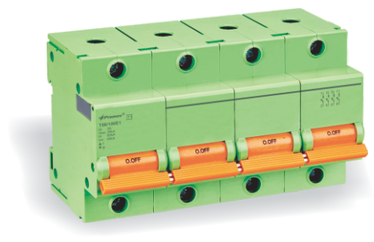
Electrical Specifications					
Model	VD10/150	VD10/275	VD10/320	VD10/385	VD10/440
Max. Continuous Operating Voltage **Uc**	150V	275V	320V	385V	440V
Nominal Discharge Current (8/20μs) **In**	10kA	10kA	10kA	10kA	10kA
Maximum Discharge Current (8/20μs) **Imax**	20kA	20kA	20kA	20kA	20kA
T3 Composite Voltage Wave Test (6kV) **Voc**	3kA	3kA	3kA	3kA	3kA
5kA Limiting Voltage **Ur**	⩽0.55kV	⩽0.8kV	⩽0.9kV	⩽1.0kV	⩽1.1kV
Voltage Protection Level **Up**	⩽0.7kV	⩽1.1kV	⩽1.2kV	⩽1.5kV	⩽1.8kV
Response Time **TA**	＜25ns	＜25ns	＜25ns	＜25ns	＜25ns
Common Specifications					
In Accordance with IEC61643-11	Type II or Type III	Type II or Type III	Type II or Type III	Type II or Type III	Type II or Type III
Operating Temperature Range **Tu**	-40°C～80°C	-40°C～80°C	-40°C～80°C	-40°C～80°C	-40°C～80°C
Wiring	Phase: 2.5～25mm² Ground Wire: 4～25mm²	Phase: 2.5～25mm² Ground Wire: 4～25mm²	Phase: 2.5～25mm² Ground Wire: 4～25mm²	Phase: 2.5～25mm² Ground Wire: 4～25mm²	Phase: 2.5～25mm² Ground Wire: 4～25mm²
Enclosure Protection Level	IP20	IP20	IP20	IP20	IP20
Max. Current In Remote Signal Contact	AC: 0.2A/125V DC: 0.5A/48V	AC: 0.2A/125V DC: 0.5A/48V	AC: 0.2A/125V DC: 0.5A/48V	AC: 0.2A/125V DC: 0.5A/48V	AC: 0.2A/125V DC: 0.5A/48V
Screw Torque	2.5N.m/0.4N.m	2.5N.m/0.4N.m	2.5N.m/0.4N.m	2.5N.m/0.4N.m	2.5N.m/0.4N.m
Rail Type	35mm DIN rail EN 60715	35mm DIN rail EN 60715	35mm DIN rail EN 60715	35mm DIN rail EN 60715	35mm DIN rail EN 60715

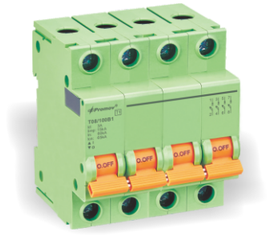
T08
Low Voltage SPD Specific Disconnector(SSD)

- ► High energy contact with long service life;
- ► High surge withstanding capability without faulty tripping;
- ► Trip below 3±1A power frequency current;
- ► High short circuit breaking capacity;
- ► Full specification, matching T1, T2, T3 SPD;
- ► Specifications controls tripping, 35mm rail installation.

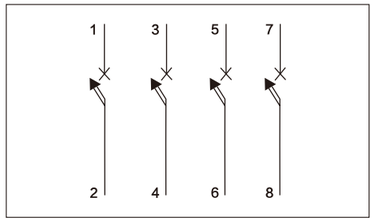
exclusive electrical symbol



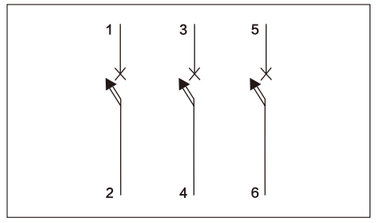


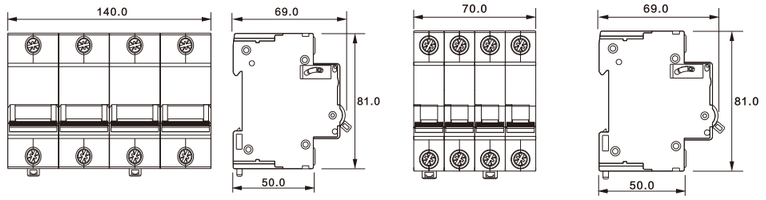


4P



3P





Electrical Specifications						
	T1 Class		T2 Class			
Model	T08/100E1	T08/100E2	T08/100B1	T08/100B2	T08/80E1	T08/80E2
Rated service short-circuit breaking capacity (Icn)	65kA	100kA	65kA	100kA	65kA	100kA
Nominal discharge current (In)	80kA(8/20μs)		60kA(8/20μs)		40kA(8/20μs)	
Max. discharge current (Imax)	/		/		80kA(8/20μs)	
Impulse discharge current (Iimp)	25kA(10/350μs)		15kA(10/350μs)		/	
Rated impulse withstand voltage (Uimp)	6kV		6kV		4kV	
Rated operating voltage (Ue)	1P、2P: AC230V/240V 50/60Hz ; 3P、4P: AC230V/400V 50/60Hz		1P、2P: AC230V/240V 50/60Hz ; 3P、4P: AC230V/400V 50/60Hz			
Rated insulation voltage (Ui)	AC500V		AC500V			
Min. delay action current (Id)	3±1A(trip under 5 seconds)		3±1A(trip under 5 seconds)			
Min. Instantaneous action current (Ii)	5A		5A			
Common specifications						
Mechanical life	>1000 times		>1000 times			
Wiring screw	IP20		IP20			
The minimum area of connecting cables	M6 2.5N.m		M6 2.5N.m			
The maximum area of connecting cables	2.5mm²/flexible		2.5mm²/flexible			
The relationship between protection action and	25mm²/flexible		25mm²/flexible			
Working environment	temperature: -25℃~+60℃ relative humidity: <95%		temperature: -25℃~+60℃ relative humidity: <95%			
Rail installation	EN60715(35mm)		EN60715(35mm)			
Remote signal contact	130VDC@1A 240VAC@6A close or open		130VDC@1A 240VAC@6A close or open			
Remarks	Switching SPD shall match multi-gap type					

Promov®

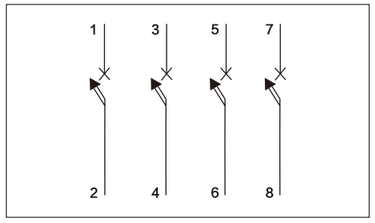
T08
Low Voltage SPD Specific Disconnector(SSD)



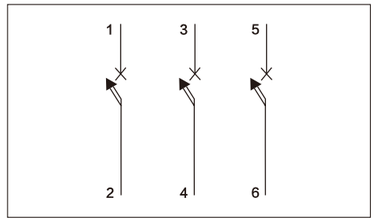




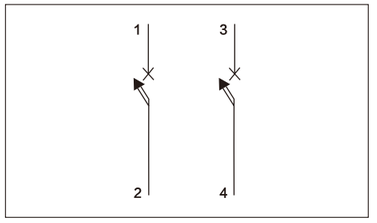
4P

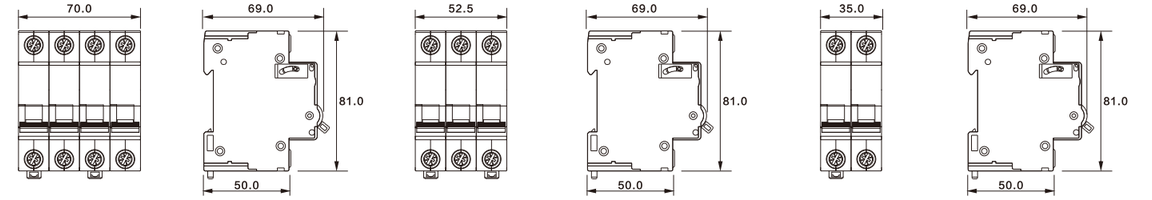


3P



2P





	T2 Class		T2 Class		T2 / T3 Class	
Model	T08/60E1	T08/60E2	T08/40E1	T08/40E2	T08/20E1	T08/20E2
Rated service short-circuit breaking capacity (Icn)	65kA	100kA	65kA	100kA	65kA	100kA
Nominal discharge current (In)	30kA(8/20μs)		20kA(8/20μs)		10kA(8/20μs)	
Max. discharge current (Imax)	60kA(8/20μs)		40kA(8/20μs)		20kA(8/20μs)	
Impulse discharge current (Iimp)	/		/		/	
Rated impulse withstand voltage (Uimp)	4kV		4kV		4kV	
Rated operating voltage (Ue)	1P、2P: AC230V/240V 50/60Hz ; 3P、4P: AC230V/400V 50/60Hz		1P、2P: AC230V/240V 50/60Hz ; 3P、4P: AC230V/400V 50/60Hz		1P、2P: AC230V/240V 50/60Hz ; 3P、4P: AC230V/400V 50/60Hz	
Rated insulation voltage (Ui)	AC500V		AC500V		AC500V	
Min. delay action current (Id)	3±1A(trip under 5 seconds)		3±1A(trip under 5 seconds)		3±1A(trip under 5 seconds)	
Min. Instantaneous action current (Ii)	5A		5A		5A	
Common specifications						
Mechanical life	>1000 times		>1000 times		>1000 times	
Wiring screw	IP20		IP20		IP20	
The minimum area of connecting cables	M6 2.5N.m		M6 2.5N.m		M6 2.5N.m	
The maximum area of connecting cables	2.5mm²/flexible		2.5mm²/flexible		2.5mm²/flexible	
The relationship between protection action and	25mm²/flexible		25mm²/flexible		25mm²/flexible	
Working environment	temperature: -25℃~+60℃ relative humidity: <95%		temperature: -25℃~+60℃ relative humidity: <95%		temperature: -25℃~+60℃ relative humidity: <95%	
Rail installation	EN60715(35mm)		EN60715(35mm)		EN60715(35mm)	
Remote signal contact	130VDC@1A 240VAC@6A close or open		130VDC@1A 240VAC@6A close or open		130VDC@1A 240VAC@6A close or open	

T08
SSD Automatic

■ SSD with Automatic Recloser Match Design



TA2-1 & T08 (1P)



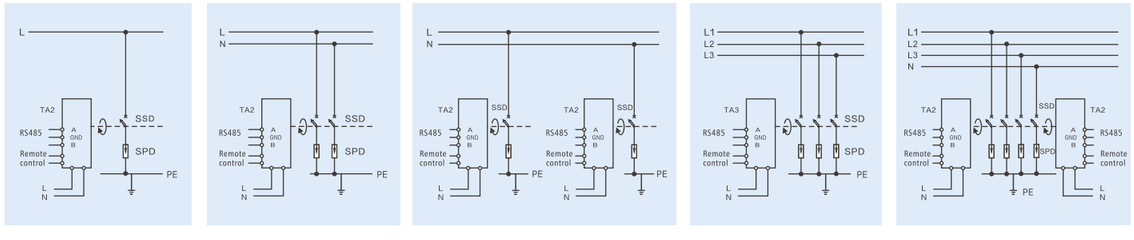
TA2-1 & T08 (2P)



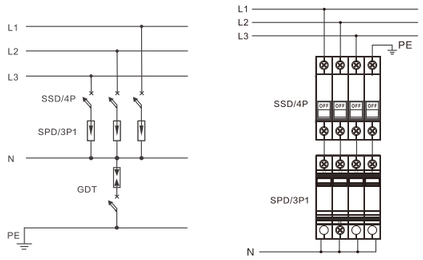
TA3-1 & T08 (3P)



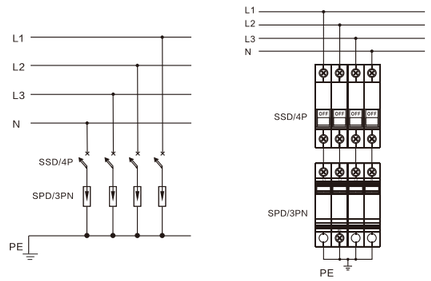
TA2-1 & T08 (4P)



■ Used in the protection for 3P1



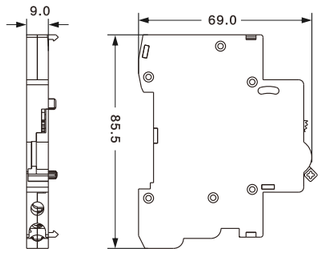
■ Used in the protection for 3PN(4P)

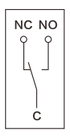


T08R, The remote communication accessory to SPD back-up protectors



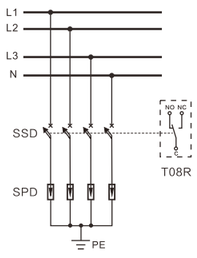
T08R is installed on the side of SSD. when any of the SSD trips, closing wrench presses remote communication bar, and the lever makes switch work.







T08R Design Application



VD10F/VC20F/VB40F/VA60F/VA150F
Wind Power SPD

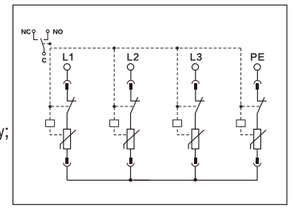
This kind of product is applied to protect wind power equipment and wind power sensitive devices from lightning overvoltage and transient overvoltage, which is widely used in power line protection in the wind power industry.

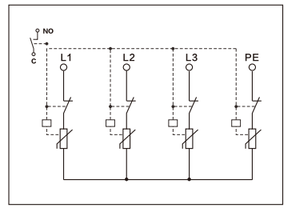


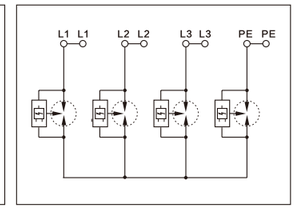




- ▶ Low Residual Voltage with Fast Response;
- ▶ Red Flag Failure Indication ;
- ▶ Thermal Controlled Overheated Tripping
- ▶ Mechanism, Link to Red Flag Indicator;
- ▶ High Energy Capacity Zinc Oxide Varistor- High Discharge Current Capacity;







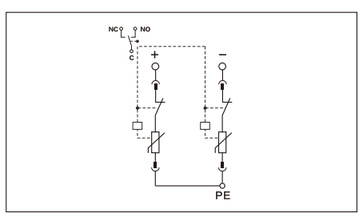
Electrical Specifications					
Model	VD10F/690	VC20F/690	VB40F/690	VA60F/690	VA150BF/690
Max. Continuous Operating Voltage **Uc**	690VAC	690VAC	690VAC	690VAC	690VAC
Voltage Protection Level **Up**	⩽ 3.0kV	⩽ 3.5kV	⩽ 4.2kV	⩽ 4.0kV	⩽ 3.0kV
Nominal Discharge Current (8/20μs)	10kA	20kA	40kA	60kA	limp 15kA(10/350μs)
Maximum Discharge Current(8/20μs)**Imax**	20kA	40kA	80kA	100kA	
Response Time **TA**	<25ns	<25ns	<25ns	<25ns	<25ns
Leakage Current	<20μA	<20μA	<20μA	<20μA	<80μA
Common Specifications					
External Disconnector	SCB: T08F/20F	SCB: T08F/40F	SCB: T08/80F	SCB: T08/100BF	SCB: T08F/100BF
Operating Temperature Range **Tu**	-40℃~80℃	-40℃~80℃	-40℃~80℃	-40℃~80℃	-40℃~80℃
Minimum area of connecting cable(min)	4mm^2	6mm^2	10mm^2	10mm^2	16mm^2
Maximum area of connecting cable(max)	25mm^2	25mm^2	25mm^2	25mm^2	2*25mm^2
Enclosure Protection Level	IP20	IP20	IP20	IP20	IP20
Max. AC in remote comunication contact	0.2A/125VAC	0.2A/125VAC	0.2A/125VAC	0.2A/125VAC	0.2A/125VAC
Max. DC in remote comunication contact	0.5A/48VDC	0.5A/48VDC	0.5A/48VDC	0.5A/48VDC	0.5A/48VDC
Crimping Screw	M6/M2	M6/M2	M6/M2	M6/M2	M6
Screw Torque	3.5N.m/0.2N.m	3.5N.m/0.2N.m	3.5N.m/0.2N.m	3.5N.m/0.2N.m	3.5N.m/0.2N.m
Material of Case	PBT/PA66 UI94 V-0	PBT/PA66 UI94 V-0	PBT/PA66 UI94 V-0	PBT/PA66 UI94 V-0	PBT/PA66 UI94 V-0
Rail Type	35mm DIN rail EN 60715	35mm DIN rail EN 60715	35mm DIN rail EN 60715	35mm DIN rail EN 60715	35mm DIN rail EN 60715

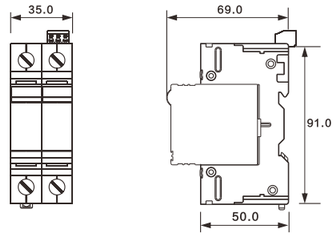
VC10D
DC & PV SPD

This kind of product is applied to protect DC system equipment from lightning overvoltage and transient overvoltage, which is widely used in PV combiner box, inverter, DC distribution box etc.
Low residual voltage with fast response

- Low Residual Voltage with Fast Response;
- Red Flag Failure Indication;
- Thermal Controlled Overeated Tripping Mechanism, Link to Red Flag Indicator;
- High Energy Capacity Zinc Oxide Varistor- High Discharge Current Capacity;







Electrical Specifications		
Model	VD10D/85	VD10D/38
Max. Continuous Operating Voltage **Uc**	85VDC	38VDC
Voltage Protection Level **Up**	⩽ 0.6kV	⩽ 0.5kV
Nominal Discharge Current (8/20μs)	10kA	10kA
Maximum Discharge Current(8/20μs) **Imax**	20kA	20kA
Response Time **TA**	＜25ns	＜25ns
Leakage Current	＜20μA	＜20μA
Common Specifications		
Operating Temperature Range **Tu**	-40℃~80℃	-40℃~80℃
Minimum area of connecting cable(min)	4mm²	4mm²
Maximum area of connecting cable(max)	25mm²	25mm²
Enclosure Protection Level	IP20	IP20
Max. AC in remote comunication contact	0.2A/125VAC 0.1A/220VAC	0.2A/125VAC 0.1A/220VAC
Max. DC in remote comunication contact	0.5A/48VDC 0.1A/110VDC 0.1A/220VDC	0.5A/48VDC 0.1A/110VDC 0.1A/220VDC
Crimping Screw	M6/M2	M6/M2
Screw Torque	6N.m/0.2N.m	6N.m/0.2N.m
Enclosure Material	PBT/PA66 UI94 V-0	PBT/PA66 UI94 V-0
Rail Type	35mm DIN rail EN 60715	35mm DIN rail EN 60715

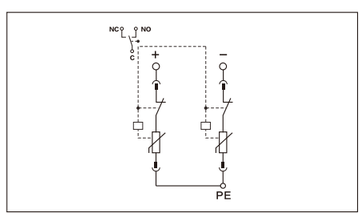
VC20D
DC & PV SPD

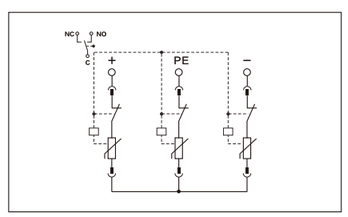
This kind of product is applied to protect DC system equipment from lightning overvoltage and transient overvoltage, which is widely used in PV combiner box, inverter, DC distribution box etc.
Low residual voltage with fast response

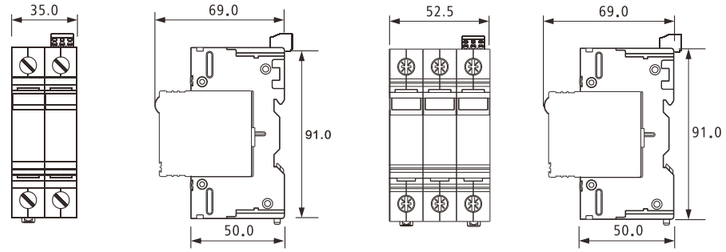
- Low Residual Voltage with Fast Response;
- Red Flag Failure Indication;
- Thermal Controlled Overeated Tripping Mechanism, Link to Red Flag Indicator;
- High Energy Capacity Zinc Oxide Varistor- High Discharge Current Capacity;











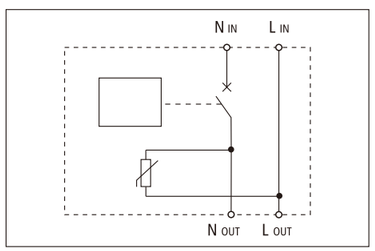
Electrical Specifications						
Model	VC20D/85	VC20D/170	VC20D/350	VC20D/500	VC20D/1200	VC20D/1300
Max. Continuous Operating Voltage **Uc**	85VDC	170VDC	350VDC	500VDC	1200VDC	1300VDC
Voltage Protection Level **Up**	⩽ 0.8kV	⩽ 1.1kV	⩽ 1.5kV	⩽ 1.8kV	⩽ 3.6kV	⩽ 4.0kV
Nominal Discharge Current (8/20μs)	20kA	20kA	20kA	20kA	20kA	20kA
Maximum Discharge Current(8/20μs) **Imax**	40kA	40kA	40kA	40kA	40kA	40kA
Response Time **TA**	＜25ns	＜25ns	＜25ns	＜25ns	＜25ns	＜25ns
Leakage Current	＜20μA	＜20μA	＜20μA	＜20μA	＜20μA	＜20μA
Common Specifications						
Operating Temperature Range **Tu**	-40℃~80℃				-40℃~80℃	
Minimum area of connecting cable(min)	4mm²				4mm²	
Maximum area of connecting cable(max)	25mm²				25mm²	
Enclosure Protection Level	IP20				IP20	
Max. AC in remote comunication contact	0.2A/125VAC 0.1A/220VAC				0.2A/125VAC 0.1A/220VAC	
Max. DC in remote comunication contact	0.5A/48VDC 0.1A/110VDC 0.1A/220VDC				0.5A/48VDC 0.1A/110VDC 0.1A/220VDC	
Crimping Screw	M6/M2				M6/M2	
Screw Torque	6N.m/0.2N.m				6N.m/0.2N.m	
Enclosure Material	PBT/PA66 UI94 V-0				PBT/PA66 UI94 V-0	
Rail Type	35mm DIN rail EN 60715				35mm DIN rail EN 60715	

Overvoltage & Voltage Dip Protector
Single Phase

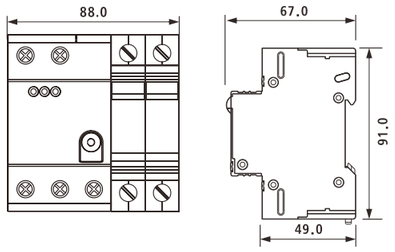
TPS220 series product, single overvoltage & voltage dip is developed based on China standard JGJ242-2011 standard. Household appliance, office automation device and lighting device etc will be damaged because of phase loss in power supply system, three phase imbalance, ferroresonance etc. TPS220 series product can achieve overvoltage and voltage dip protection.

- ▶ High anti–inteference capability;
- ▶ With self-check function to guarantee electrical safety;
- ▶ Protector will not take false action under transient or temporary overvoltage;
- ▶ With lightning protection function;
- ▶ Rail installation.





Model		TPS220
Electrical specifications		
Operating voltage		230VAC
Operating frequency		50Hz/60Hz
Rated operating current		16A 、25A、32A、40A、50A、63A
Max. continuous operating voltage		320VAC
Nominal discharge current In(8/20μs)		10kA
Max. discharge current Imax (8/20μs)		40kA
Voltage protection level Up		⩽1.5kV
Standby consumption		1.4W
Common specifications		
Overvoltage action value		264±5VAC
Overvoltage recovery value		254±5VAC
Voltage dip action value		176±5VAC
Voltage dip recovery value		186±5VAC
protection action time		0.5s
Recovery delay time		10±2s

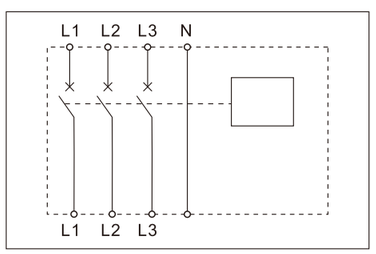


AS-4P Series Overvoltage & Voltage Dip Protector
Three Phase

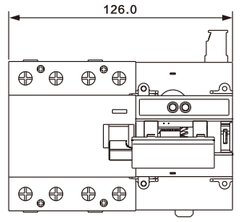
AS/4P series product, three phase four wire overvoltage & voltage dip protector is developed based China National Standard JB/T12762-2015 and market demand. This product has maximum safe operating voltage, which can cut off the circuit stably when the voltage of circuit range is low to 50V or high up to 400V, protecting electrical appliance. When applicance fails because of single phase overvoltage & voltage dip resulting from neutral line failure, it can protect the appliance and circuit. Adopting high speed & micro low consumption processor as the core, air circuit breaker as the main circuit and modularization design, it has the good performance and high quality.

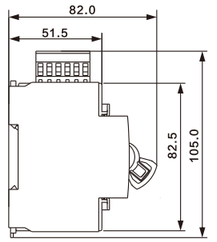
- ▶ Standard module design;
- ▶ Automatic reseting circuit, no need manual operation;
- ▶ Transient and temporary overvoltage, no faulty action;
- ▶ Rail installation with easy operation;
- ▶ Support manual control;
- ▶ Three phase tripping simultaneously.



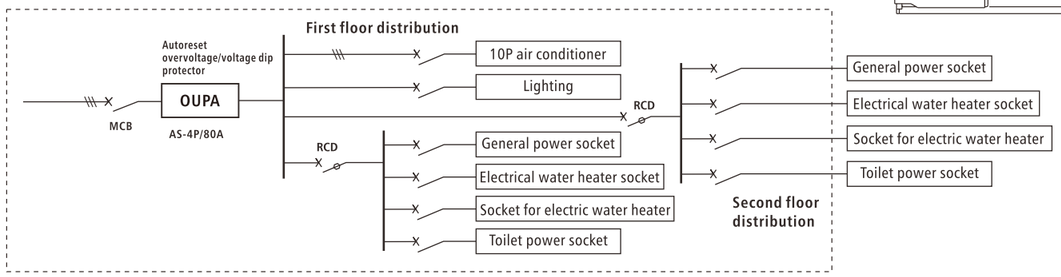


Electrical specifications	
Model	AS-4P
Operating Voltage	230VAC/380VAC
Operating Frequency	50Hz/60Hz
Rated Operating Current	16A、25A、32A、40A 、50A、63A、80A、100A
Specifications	
Overvoltage Action Value	264V±5VAC
Overvoltage Recovery Value	253V±5VAC
Voltage Dip Action Value	176V±5VAC
Voltage Dip Recovery Value	187V±5VAC
Min. Action Time	⩽0.5s
Fault Neutral Line Protection	⩽1s
Recovery delay	10±2s

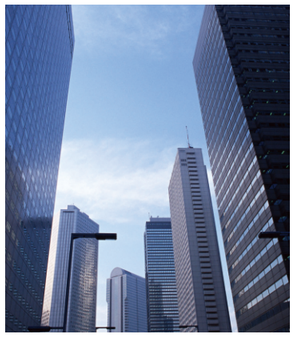




Installation



Application



Construction Industry

1. Beijing Sensor Building;
2. Beijing kangying service center for nursing home;
3. Chang'an car EXPO and Guangda Environmental Protection
4. Explosion disk of Changchun Chemical and UPS/EPS switchboard
5. CAEP (China Academy of Engineering Physics)
6. Dezhou Armed Police Force
7. Foshan Shunde Switch Company
8. Foshan Vanke's 89 period of Power Distribution Project
9. Jinyu Tixiang of Foshan Vanke
10. Harbin University of Industry
11. Improvement Project of Thunder Prevention of Hainan Sanya Coastal Park
12. Hangzhou Dajiangdong + Burma
13. Hangzhou Ha'ersi Industrial Park
14. Hangzhou Staff Culture Center
15. Huzhou Kitchen Waste Disposing Project
16. Ji'nan Lixia Financial Service Center
17. Hospital Project of Jiangsu Maternal and Child Care Service Centre
18. Jiangsu Kaisha Electrical Company Taizhou People's Hospital
19. Jiangsu People's Hospital
20. Longhai IT Room
21. Example Project of Longhai Government Affair Website
22. Luoyang Poly Real Estate
23. Luoyang Poly Construction
24. Luoyang Zhengda Plaza
25. Nanjing Project of Emergency Communication
26. First Expansion Project of Nanjing Expo
27. Weak Current Thunder Prevention of Nanjing Shengtian Qingshan County
28. Nanjing Wanda Project
29. Ningbo Zhongjin Reconstruction Project
30. Qinghai Thunder Prevention Project
31. Qinghai Industrial Project
32. Qinghai Cooper Mine Project
33. Rui'An Mayu Second Waterworks
34. Shandong Hualu Chemical Fertilizer Company
35. Shandong Shuili Building
36. Shandong New Jili Real Estate Company



Petrochemical Industry

1. Qingdao Huangdao Oil Depot
2. Oil Depot of Hebei Huabei Oil Field
3. Petrochemical Base of Maoming and Zhanjiang, Guangdong
4. Xinjiang Construction Legion of Ningbo Tian'An Switch Company
5. Tianying Petrochemical Incorporated Company



Transportation

1. Subway line 2 of Hangzhou Metro
2. Subway Line 2 of Hefei Metro
3. Coach Object of Huaibei to Xiaoxianbei
4. Jinan Railway Polytechnic
5. Jiulong Mingzhu
6. Ninggao Line Object of Nanjing Metro
7. Distribution Box of Nanjing Metro Line 2
8. Object of Ningbo Metro Shounan(Jiangshan) Depot
9. Qingzang Railway Station
10. Shanghai Metro Line 1, 3, 5, 9, 11, 17
11. BS System of Railway Substation
12. Second Lightening Protection of Railway Substation
13. Lightening Protection of Railway Substation
14. Xiamen Metro Line 1, 2, 3
15. Xiamen Xiang'An Tunnel Traffic Reconstruction Project
16. Coach Communication System of Huaibei to Xiaoxianbei
17. Yangshan Harbor Object, Shanghai Metro Line 1
18. CRH (China Railway High-speed Train)
19. China Railway No.13 Engineering Group Zhengwan High-Speed Train Object
20. Chongqing Metro
21. Shenzhen Airport
22. Chengdu New Airport
23. Yongqiang Airport
24. Thunder Prevention Project of Nanning Airport
25. Lukou Airport
26. Rizhao Airport
27. Yangzhou Taizhou Airport
28. Zhoushan Airport
29. Jinggangshan Airport
30. Wuyishan Airport
31. Tianzihu Airport
32. Wuxi Airport
33. Huangshan Airport
34. Lijiang Airport
35. Liancheng Airport
36. Jinjiang Airport
37. Scenic Spot of The Forbidden City, Beijing
38. Scenic Spot of Lushan, Jiangxi
39. Scenic Spot of Hailongtun Tusi Relics
40. Beijing Qinglong Gorge Great Wall

Promov®

Application



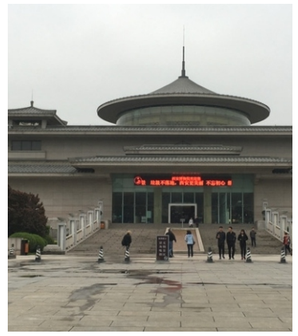
Energy Industry

1. Low-Voltage Project of Anqing Shuguang Fine Chemicals
2. Anrui Photoelectricity
3. Pakistan Ta'Er Coal Field Project
4. Guangda Environment
5. Guangxi Power Grid
6. Huiyao House Purchasing
7. AC-DC Screen Objects
8. Nanxun South Taihu Thermoelectricity Project
9. Ningbo Changfeng Thermoelectricity
10. Wenzhou Photovoltaic Power Generation Projects



Scenic Sites

1. Jiangxi Lushan Mountain
2. Beijing Great Wall
3. Phoenix Mountain
4. Shanxi Province Historical Museum
5. Caoe River dam
6. Kungfu Mountain
7. Shenxianju Holiday Resort in Zhejiang
8. Hali Amusement Park in Hangzhou
9. Angel Park in Zhejiang
10. Golf Court in Kunming
11. Slender West Lake



Historic Sites

1. Forbidden City
2. Yanan pagoda
3. Kumbum Monastery
4. Western Qing Tombs
5. Hailongtun Historic Site
6. Red Army Historic Site in Yudu

ENVIROIVMENTAL LABORATORY



Able to conduct low temperature, high temperature and humidity tests;

PHYSICAL & CHEMICAL LABORATORY



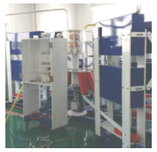
Able to make materials metallurgical analysis, spectral analysis, RoHs analysis, flame retardant rating, CTI and high-pot tests;

EMC LABORATORY



Able to make low-frequency transmission, ESD, electrical fast transient, near-end crosstalk, voltage dips, spectrum, network analysis and other tests;

LIGHTNING IMPACT LABORATORY



Surge Capability:
8/20μs: 260kA、
10/350μs: 60kA、
1.2/50μs

SPD SECURITY LABORATORY



Able to conduct tests on SPD's thermal stability, fire boundary conditions, and make power frequency 1A-300A test;

MECHANICS LABORATORY



Bendulum impact, tension, pressure, torsion, and hardness tests;

CNAS LABORATORY OF XIAMEN TAIHANG TECHNOLOGY

Xiamen Taihang has a 1100 square meter CNAS accredited laboratory. It is the first-class lightning device testing laboratory in China and many of its testing equipment reach the international technical indicators.

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