

SPD

C series Ultra thin

Catalogue (2022)



【Factory video @Youtube】

CZYB-E09-C.01/2022.09

Headquarters

SHANGHAI CHENZHU INSTRUMENT CO.,LTD.

Add: Building 6, 201 Minyi Rd., Shanghai 201612, P.R.China

Tel: +86-21-64360668

E-mail: chenzhu@chenzhu-inst.com

Web: en.chenzhu-inst.com

ASEAN Region

CHENZHU SDN BHD (1314739-P)

Add: 1F-16, IOI Business Park, No. 1, Persiaran Puchong Jaya Selatan,
Bandar Puchong Jaya Selatan, 47100 Puchong, Selangor, Malaysia.

Tel: +60-3-80704739

E-mail: sales@chenzhu-asean.com

Web: www.chenzhu-asean.com



<https://en.chenzhu-inst.com/>



CHENZHU COMPANY OVERVIEW



Shanghai Chenzhu Instrument Co., Ltd. was founded in April, 2002, who was originated from Shanghai Institute of Process Automation Instrumentation. CHENZHU is a professional company with core expertise of R&D, manufacturing and sale service of high quality safety products, such as isolated barriers, signal conditioners, surge protective devices, safety relays etc.

MANAGEMENT SYSTEMS



ISO9001



ISO14001



ISO45001



IECEx QUALITY ASSESSMENT

R&D Strength

Based on ISO/IEC/GB standards, CHENZHU has established the professional laboratory which is applied up to 70 test capabilities and verification items in CHENZHU's safety electrical products' development process.



R&D Team

28%

Work Force



R&D Investment

11%

of Sale Revenue



Innovation

110+

Patents



Testing Facility

80+

Capabilities

Smart Factory

CHENZHU factory is continually driven by lean management and flexible production. By our strict quality examination, CHENZHU ensures the production meets the design specification and satisfies our customers.



Factory

3500m²

In total



Max Cap.

2,000,000pcs

Year



Lean Production

10+

Years' experience



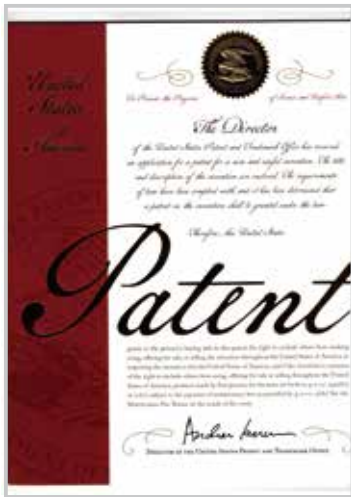
■ CE Certification



■ SIL Certification



■ IECEx Certification



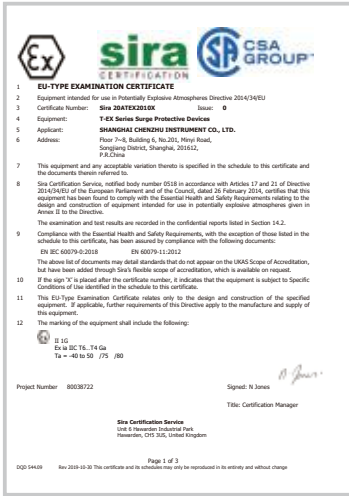
■ US Patent



■ European Patent



■ Invention Patent



■ ATEX Certification



■ CCC Certification



■ UL Certification



■ Utility Model Patent



■ Utility Model Patent



■ Utility Model Patent



■ Type Test Report



■ Explosion Protection Certificate of Conformity



■ Product Liability Insurance



■ Industrial Design Patent



■ Industrial Design Patent



■ Industrial Design Patent

I C series Ultra thin SPD

Surge Protective Device(abbr. SPD) is applied to surge (inductive thunder) and transient overvoltage(e.g. switching transients, electrostatic discharge) protection on many kinds of signal or power lines, which could lead high power surge to the ground.

It could be a substitute of wiring connection, as their sizes are similar.



- ◆ Width: 3.5mm(4.5mm with cover)
- ◆ 2-wire signal protection
- ◆ Push-in connection
- ◆ Suitable for explosion proof area
- ◆ Multistage protection circuit
- ◆ Customized sign



- ◆ Width: 6 mm(with cover)
- ◆ 2-wire signal protection
- ◆ Push-in or screw connection
- ◆ Suitable for explosion proof area
- ◆ Multistage protection circuit
- ◆ Customized sign



- ◆ Width: 6 mm(with cover)
- ◆ 3-wire signal protection
- ◆ Push-in or screw connection
- ◆ Suitable for explosion proof area
- ◆ Multistage protection circuit
- ◆ Customized sign



- ◆ Width: 12mm/P
- ◆ In: 20kA/P
- ◆ Single phase power protection
- ◆ Status indication& Remote signaling
- ◆ Redundant wiring
- ◆ Customized sign



- ◆ Width: 12mm/P
- ◆ In: 20kA/P
- ◆ Three phase power protection
- ◆ Status indication& Remote signaling
- ◆ Redundant wiring
- ◆ Customized sign

3.5mm Signal SPD (4.5mm with cover)

Model No.	Order No.	Rated current I _L	Protection	Max. Continuous operating voltage U _c	Norminal discharge current I _n (8/20μs)	Wiring	Impulse discharge current I _{imp} (10/350μs)	Page
C-5T2-EX.M	7059240	500mA	IS, TC, RS-485, CAN	6V DC	10kA	2	2.5kA	9
C-24B2-EX.M	7060264		IS, AI, AO, DI, DO	32V DC				9
C-5T2.M	7098835	800mA	TC, RS-485, CAN	6V DC	10kA	2	2.5kA	10
C-24B2.M	7074711		AI, AO, DI, DO	32V DC				10

6mm Signal SPD、24VDC Power SPD

Model No.	Order No.	Wiring	Protection	Max. Continuous operating voltage U _c	Rated current I _L	Norminal discharge current I _n (8/20μs)	Impulse discharge current I _{imp} (10/350μs)	Page
C-5T2-EX	7031750...	2	IS, TC, RS-485、CAN	6V DC	500mA	10kA	2.5kA	11
C-24B2-EX	7028376...	2	IS, AI, AO, DI, DO	32V DC				11
C-5R3-EX	7092664...	3	IS, RTD	6V DC				12
C-24B3-EX	7061738...	3	IS, AI, AO、DI、DO、RS-232	32V DC	800mA	10kA	2.5kA	12
C-5T2	7092615...	2	TC, RS-485、CAN	6V DC				13
C-24B2	7053320...	2	AI、AO、DI、DO	32V DC				13
C-5R3	7036020...	3	RTD	6V DC	10 A	10 A	10 A	14
C-24B3	7031090...	3	AI、AO、DI、DO、RS-232	32V DC				14
C-24P	7065366...	2	24VDC power supply (<10A)	58VDC/40VAC				15

12mm Power SPD (Width: 12mm/P)

Model No.	Order No.	Remote signaling	Protection	Max. Continuous operating voltage U _c	Recommended backup fuse	Normal discharge current I _n (8/20μs)	Max. discharge current I _{max} (8/20μs)	Page				
C2-20/2P	7012025	—	TN System (Single phase)	320VAC	40A gG	10kA	20kA	17				
C2-20/2PF	7039389	✓						17				
C2-20/3P	7073441	—	IT System (Three phase)、 TN-C Systme (Three phase)					18				
C2-20/3PF	7011201	✓							17			
C2-20/4P	7096735	—	TN-S System (Three phase)						17			
C2-20/4PF	7057147	✓								17		
C2-20/1P+1	7071193	—	TT System (Single phase)	18								
C2-20/1P+1F	7019940	✓			18							
C2-20/3P+1	7015727	—	TT System (Three phase)		18							
C2-20/3P+1F	7046918	✓				18						
C2-40/2P	7078245	—	TN System (Single phase)						19			
C2-40/2PF	7090181	✓							19			
C2-40/3P	7056563	—	IT System (Three phase)、 TN-C System (Three-phase)	385VAC					80A gG	20kA	40kA	19
C2-40/3PF	7088561	✓										19
C2-40/4P	7067406	—	TN-S System (Three-phase)		20							
C2-40/4PF	7021880	✓										19
C2-40/1P+1	7091735	—	TT System (Single phase)			20						
C2-40/1P+1F	7053423	✓					20					
C2-40/3P+1	7091686	—	TT System (Three-phase)	20								
C2-40/3P+1F	7010055	✓					20					
C2-24	7097742	—	24VDC power supply system		90VDC/60VAC				21			
C2-24F	7018876	✓							21			

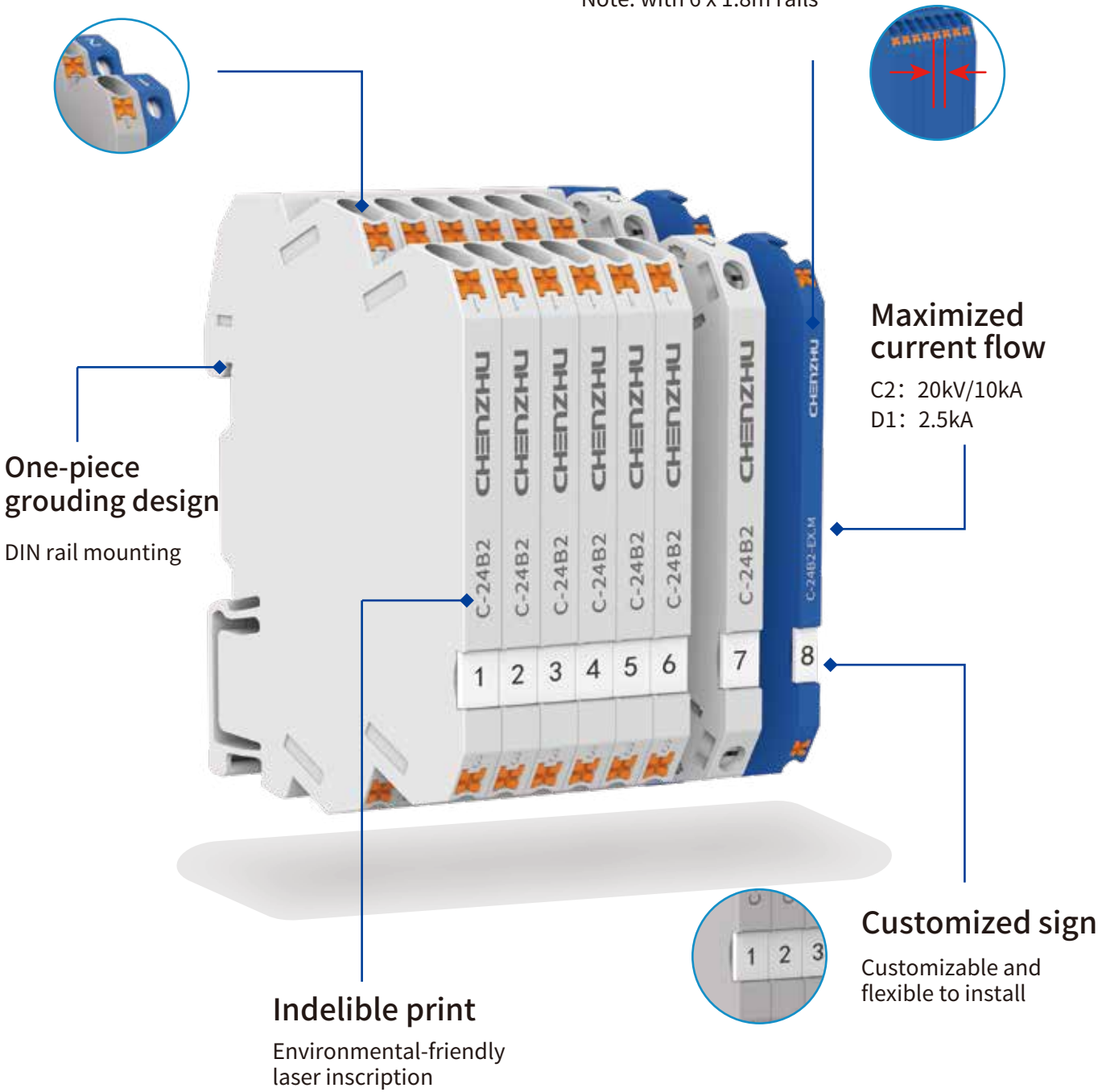
Signal SPD protects signal devices (e.g. PLC, DCS, SCADA, transmitter ,flow meter, solenoid valve) from lightning , which is applied to signals such as AI/ AO/ DI/ DO, RS485/ RS232/ RS422, RTD and TC etc..

Convenient wiring

Push-in or screw connection

Thinner design

3080 units can be installed in one enclosure
Note: with 6 x 1.8m rails



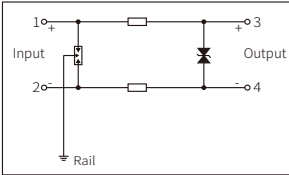
3.5mm Signal SPD

Features

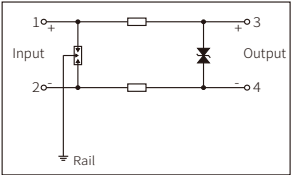
- 3.5mm Width (4.5mm with cover)
- DIN rail grounded
- Push-in connection
- Intrinsically safe explosion-proof
- C2: 20kV/ 10kA
- D1: 2.5kA

Technical Data	
Max. Continuous operating voltage Uc	
Nominal operating current Iu	
Resistance(per line)	
Nominal discharge current In (8/20μs)	
Max. discharge current Imax (8/20μs)	
Impulse discharge current Iimp (10/350μs)	
Voltage protection level Up (8/20μs)	
Bandwidth (-0.5dB)	
Response time	
Residual current IPE	
Degree of protection of enclosure(IEC60529)	
Housing material/ Flammability rating(UL94)	
Testing standard	
EX Certification	
Functional safety Certification	
Type test	
Order number	

C-5T2-EX.M

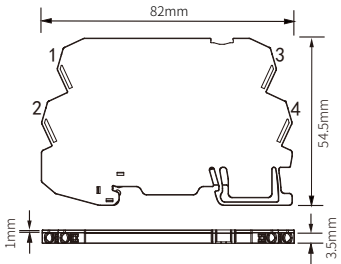


C-24B2-EX.M

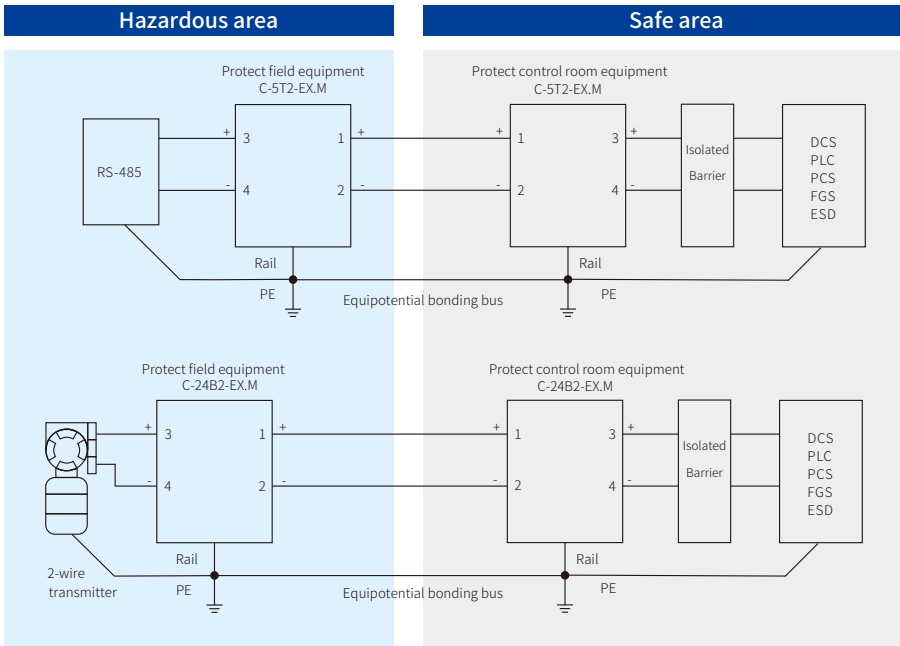


2-wire (TC, RS-485, CAN)	2-wire (AI, AO, DI, DO)
Max. Continuous operating voltage Uc	32V DC
Nominal operating current Iu	500mA
Resistance(per line)	1.1Ω
Nominal discharge current In (8/20μs)	10kA
Max. discharge current Imax (8/20μs)	20kA
Impulse discharge current Iimp (10/350μs)	2.5kA
Voltage protection level Up (8/20μs)	L-L: 40V/L-G: 600V
Bandwidth (-0.5dB)	220kHz
Response time	L-L: 1ns/L-G: 100ns
Residual current IPE	<10μA
Degree of protection of enclosure(IEC60529)	IP 20
Housing material/ Flammability rating(UL94)	PA66/V0
Testing standard	GB/T 18802.21/IEC 61643-21
EX Certification	Ex ia IIC T6...T4 Ga
Functional safety Certification	SIL3
Type test	Shanghai lightning protection center
Order number	7059240

Dimensions



Typical applications

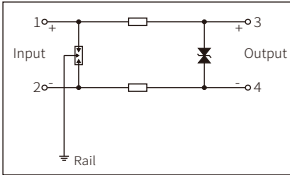


Features

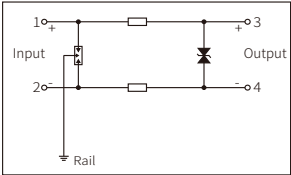
- 3.5mm Width (4.5mm with cover)
- DIN rail grounded
- Push-in connection
- C2: 20kV/ 10kA
- D1: 2.5kA

Technical Data	
Max. Continuous operating voltage Uc	
Nominal operating current Iu	
Resistance(per line)	
Nominal discharge current In (8/20μs)	
Max. discharge current Imax (8/20μs)	
Impulse discharge current Iimp (10/350μs)	
Voltage protection level Up (8/20μs)	
Bandwidth (-0.5dB)	
Response time	
Residual current IPE	
Degree of protection of enclosure(IEC60529)	
Housing material/ Flammability rating(UL94)	
Testing standard	
Certification	
Functional safety Certification	
Type test	
Order number	

C-5T2.M

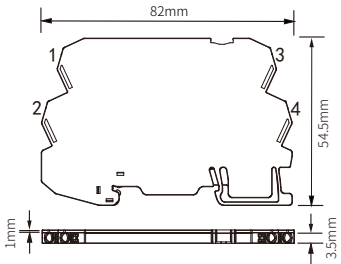


C-24B2.M

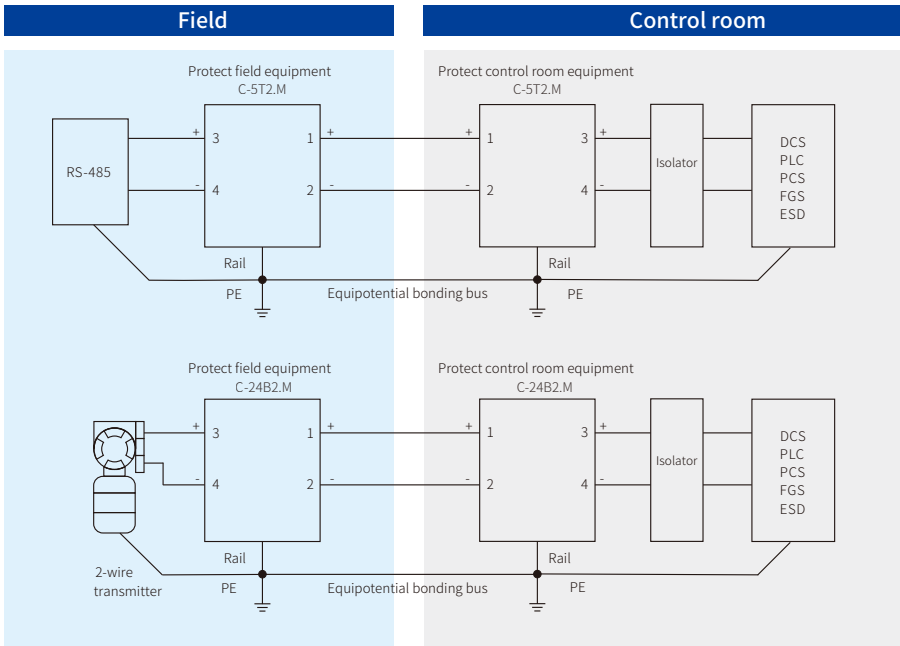


2-wire (TC, RS-485, CAN)	2-wire (AI, AO, DI, DO)
Max. Continuous operating voltage Uc	32V DC
Nominal operating current Iu	800mA
Resistance(per line)	1.1Ω
Nominal discharge current In (8/20μs)	10kA
Max. discharge current Imax (8/20μs)	20kA
Impulse discharge current Iimp (10/350μs)	2.5kA
Voltage protection level Up (8/20μs)	L-L: 40V/L-G: 600V
Bandwidth (-0.5dB)	220kHz
Response time	L-L: 1ns/L-G: 100ns
Residual current IPE	<10μA
Degree of protection of enclosure(IEC60529)	IP 20
Housing material/ Flammability rating(UL94)	PA66/V0
Testing standard	GB/T 18802.21/IEC 61643-21
Certification	SIL3
Functional safety Certification	Shanghai lightning protection center
Type test	Shanghai lightning protection center
Order number	7098835

Dimensions



Typical applications



3.5mm Signal SPD

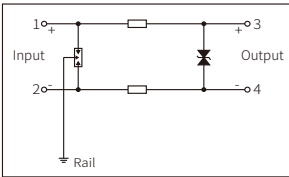
6mm Signal SPD

Features

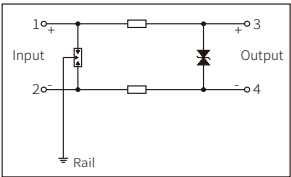
- 6mm Width
- DIN rail grounded
- Push-in or screw connection
- C2: 20kV/ 10kA
- D1: 2.5kA

Technical Data	
Max. Continuous operating voltage Uc	
Nominal operating current Iu	
Resistance(per line)	
Nominal discharge current In (8/20μs)	
Max. discharge current Imax (8/20μs)	
Impulse discharge current Iimp (10/350μs)	
Voltage protection level Up (8/20μs)	
Bandwidth (-0.5dB)	
Response time	
Residual current IPE	
Degree of protection of enclosure(IEC60529)	
Housing material/ Flammability rating(UL94)	
Testing standard	
EX Certification	
Functional safety Certification	
Type test	
Order number	

C-5T2-EX

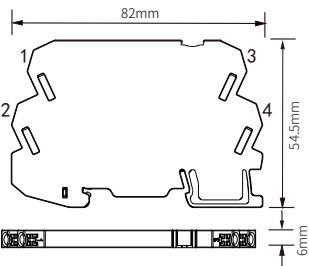


C-24B2-EX

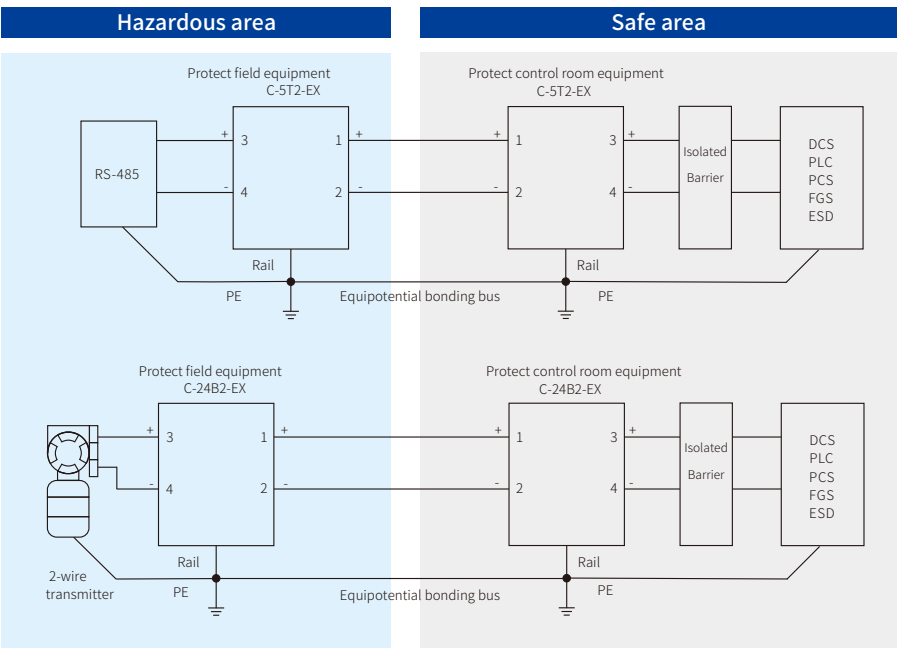


2-wire (TC、RS-485、CAN)	2-wire (AI、AO、DI、DO)
Max. Continuous operating voltage Uc	32V DC
Nominal operating current Iu	500mA
Resistance(per line)	1Ω
Nominal discharge current In (8/20μs)	10kA
Max. discharge current Imax (8/20μs)	20kA
Impulse discharge current Iimp (10/350μs)	2.5kA
Voltage protection level Up (8/20μs)	L-L: 60V/L-G: 600V
Bandwidth (-0.5dB)	40MHz
Response time	L-L:1ns/L-G: 100ns
Residual current IPE	<1μA
Degree of protection of enclosure(IEC60529)	IP 20
Housing material/ Flammability rating(UL94)	PA66/V0
Testing standard	GB/T 18802.21/IEC 61643-21
EX Certification	Ex ia IIC T6...T4 Ga
T4:-40 to +80°C; T5:-40 to +75°C; T6:-40 to +50°C	
Ui=6V; Ii=500mA; Pi=5.32W; Ci=0μF; Li=0mH	
Functional safety Certification	SIL3
Type test	Shanghai lightning protection center
Order number	Push-in: 7031750; Screw: 7085247

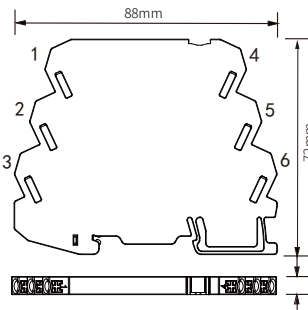
Dimensions



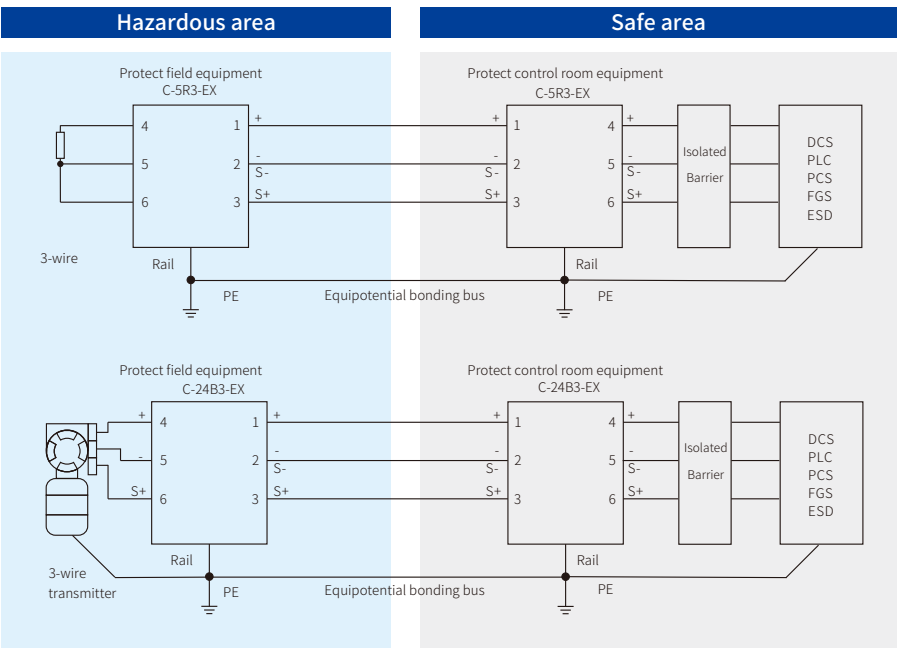
Typical applications



Dimensions



Typical applications



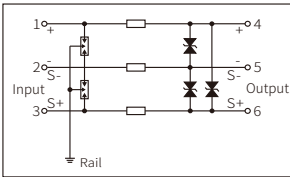
6mm Signal SPD

Features

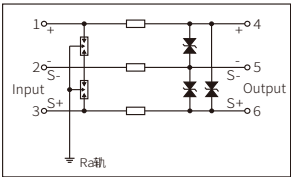
- 6mm Width
- DIN rail grounded
- Push-in or screw connection
- C2: 20kV/ 10kA
- D1: 2.5kA

Technical Data	
Max. Continuous operating voltage Uc	
Nominal operating current Iu	
Resistance(per line)	
Nominal discharge current In (8/20μs)	
Max. discharge current Imax (8/20μs)	
Impulse discharge current Iimp (10/350μs)	
Voltage protection level Up (8/20μs)	
Bandwidth (-0.5dB)	
Response time	
Residual current IPE	
Degree of protection of enclosure(IEC60529)	
Housing material/ Flammability rating(UL94)	
Testing standard	
EX Certification	
Functional safety Certification	
Type test	
Order number	

C-5R3-EX



C-24B3-EX



3-wire(RTD)	3-wire (AI、AO、DI、DO、RS-232)
Max. Continuous operating voltage Uc	32V DC
Nominal operating current Iu	500mA
Resistance(per line)	1Ω
Nominal discharge current In (8/20μs)	10kA
Max. discharge current Imax (8/20μs)	20kA
Impulse discharge current Iimp (10/350μs)	2.5kA
Voltage protection level Up (8/20μs)	L-L: 60V/L-G: 600V
Bandwidth (-0.5dB)	40MHz
Response time	L-L:1ns/L-G: 100ns
Residual current IPE	<1μA
Degree of protection of enclosure(IEC60529)	IP 20
Housing material/ Flammability rating(UL94)	PA66/V0
Testing standard	GB/T 18802.21/IEC 61643-21
EX Certification	Ex ia IIC T6...T4 Ga
T4:-40 to +80°C; T5:-40 to +75°C; T6:-40 to +50°C	
Ui=6V; Ii=500mA; Pi=5.32W; Ci=0μF; Li=0mH	
Functional safety Certification	SIL3
Type test	Shanghai lightning protection center
Order number	Push-in: 7092664; Screw: 7085023

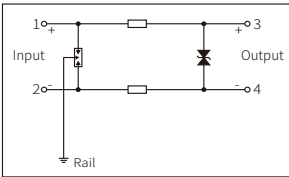
6mm Signal SPD

Features

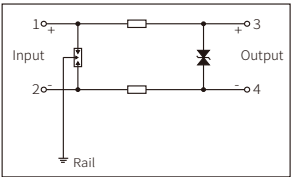
- 6mm Width
- DIN rail grounded
- Push-in or screw connection
- C2: 20kV/ 10kA
- D1: 2.5kA

Technical Data	
Max. Continuous operating voltage Uc	6V DC
Nominal operating current Iu	800mA
Resistance(per line)	1Ω
Nominal discharge current In (8/20μs)	10kA
Max. discharge current Imax (8/20μs)	20kA
Impulse discharge current Iimp (10/350μs)	2.5kA
Voltage protection level Up (8/20μs)	L-L: 40V/L-G: 600V
Bandwidth (-0.5dB)	40MHz
Response time	L-L: 1ns/L-G:100ns
Residual current IPE	<10μA
Degree of protection of enclosure(IEC60529)	IP 20
Housing material/ Flammability rating(UL94)	PA66/V0
Testing standard	GB/T 18802.21/IEC 61643-21
Certification	
Functional safety Certification	SIL3
Type test	Shanghai lightning protection center
Order number	
Push-in: 7092615; Screw: 7070096	

C-5T2



C-24B2



2-wire (TC、RS-485、CAN)	2-wire (AI、AO、DI、DO)
Max. Continuous operating voltage Uc	32V DC
Nominal operating current Iu	800mA
Resistance(per line)	1Ω
Nominal discharge current In (8/20μs)	10kA
Max. discharge current Imax (8/20μs)	20kA
Impulse discharge current Iimp (10/350μs)	2.5kA
Voltage protection level Up (8/20μs)	L-L: 60V/L-G: 600V
Bandwidth (-0.5dB)	40MHz
Response time	L-L: 1ns/L-G:100ns
Residual current IPE	<1μA
Degree of protection of enclosure(IEC60529)	IP 20
Housing material/ Flammability rating(UL94)	PA66/V0
Testing standard	GB/T 18802.21/IEC 61643-21
Certification	
Functional safety Certification	SIL3
Type test	Shanghai lightning protection center
Order number	
Push-in: 7092615; Screw: 7070096	

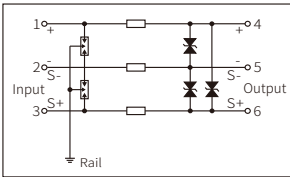
6mm Signal SPD

Features

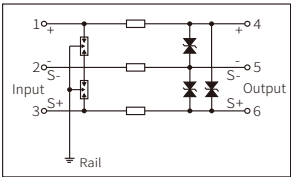
- 6mm Width
- DIN rail grounded
- Push-in or screw connection
- C2: 20kV/ 10kA
- D1: 2.5kA

Technical Data	
Max. Continuous operating voltage Uc	6V DC
Nominal operating current Iu	800mA
Resistance(per line)	1Ω
Nominal discharge current In (8/20μs)	10kA
Max. discharge current Imax (8/20μs)	20kA
Impulse discharge current Iimp (10/350μs)	2.5kA
Voltage protection level Up (8/20μs)	L-L: 40V/L-G: 600V
Bandwidth (-0.5dB)	40MHz
Response time	L-L: 1ns/L-G:100ns
Residual current IPE	<10μA
Degree of protection of enclosure(IEC60529)	IP 20
Housing material/ Flammability rating(UL94)	PA66/V0
Testing standard	GB/T 18802.21/IEC 61643-21
Certification	
Functional safety Certification	SIL3
Type test	Shanghai lightning protection center
Order number	
Push-in: 7036020; Screw: 7062156	

C-5R3

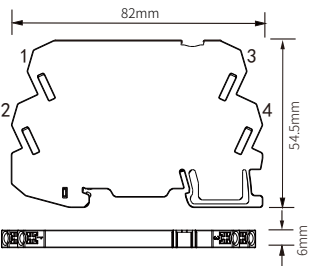


C-24B3

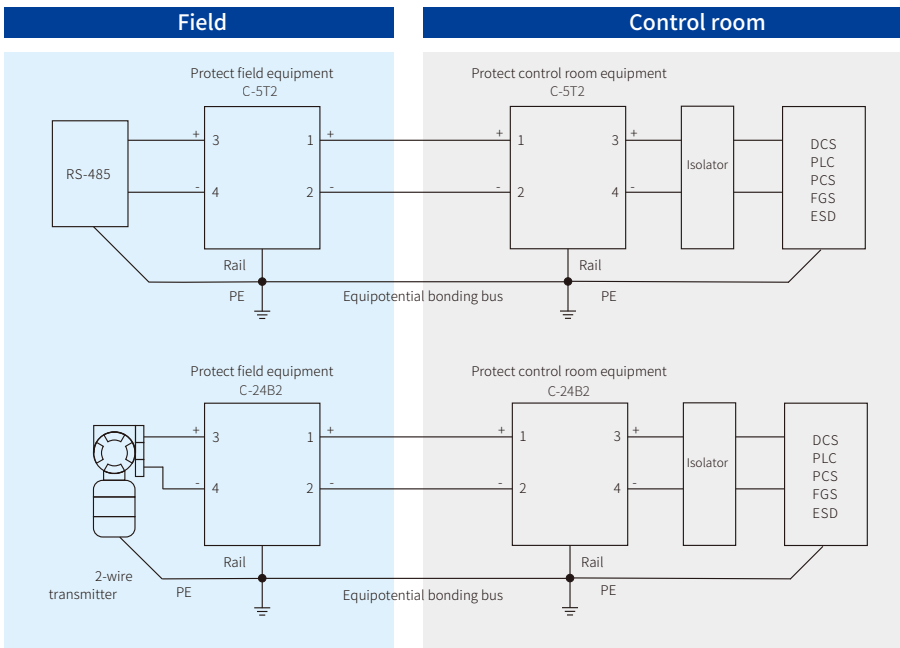


3-wire(RTD)	3-wire (AI、AO、DI、DO、RS-232)
Max. Continuous operating voltage Uc	32V DC
Nominal operating current Iu	800mA
Resistance(per line)	1Ω
Nominal discharge current In (8/20μs)	10kA
Max. discharge current Imax (8/20μs)	20kA
Impulse discharge current Iimp (10/350μs)	2.5kA
Voltage protection level Up (8/20μs)	L-L: 60V/L-G: 600V
Bandwidth (-0.5dB)	40MHz
Response time	L-L: 1ns/L-G:100ns
Residual current IPE	<1μA
Degree of protection of enclosure(IEC60529)	IP 20
Housing material/ Flammability rating(UL94)	PA66/V0
Testing standard	GB/T 18802.21/IEC 61643-21
Certification	
Functional safety Certification	SIL3
Type test	Shanghai lightning protection center
Order number	
Push-in: 7031090; Screw: 7043427	

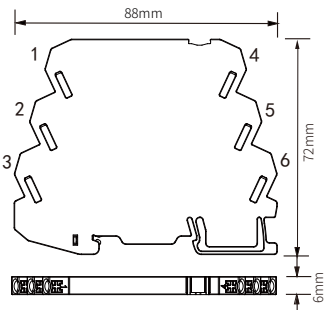
Dimensions



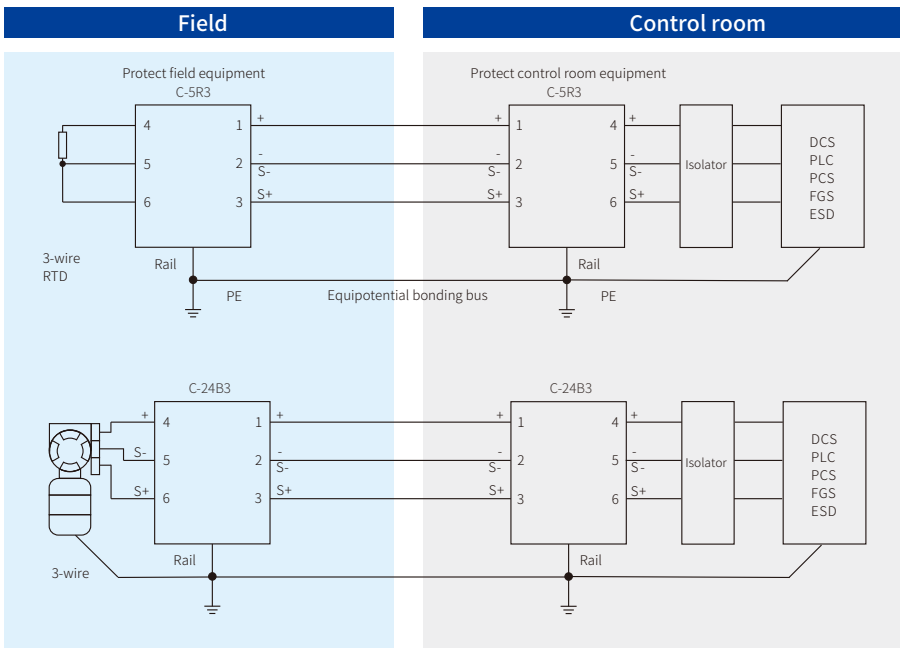
Typical applications



Dimensions



Typical applications



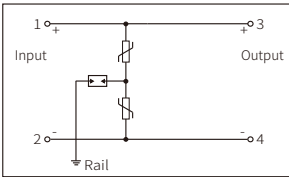
6mm Low-voltage power supply SPD

Features

- 6mm Width
- DIN rail grounded
- Push-in or screw connection
- Suitable for 24VDC circuit (<10A)
- C2: 20kV/ 10kA
- D1: 2.5kA

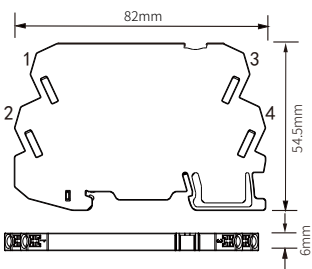
Technical Data	
Max. Continuous operating voltage Uc	58VDC/40VAC
Nominal operating current In	10A
Nominal discharge current In (8/20μs)	10kA
Max. discharge current Imax (8/20μs)	20kA
Impulse discharge current Iimp (10/350μs)	2.5kA
Voltage protection level Up	L-L: 400V/L-G: 600V
Response time	L-L: 25ns/L-G: 100ns
Residual current I _{res}	<20μA
Degree of protection of enclosure(IEC60529)	IP 20
Housing material/ Flammability rating(UL94)	PA66/V0
Testing standard	GB/T 18802.21/IEC 61643-21
Certification	
Type test	Shanghai lightning protection center
Order number	Push-in: 7065366; Screw: 7077701

C-24P

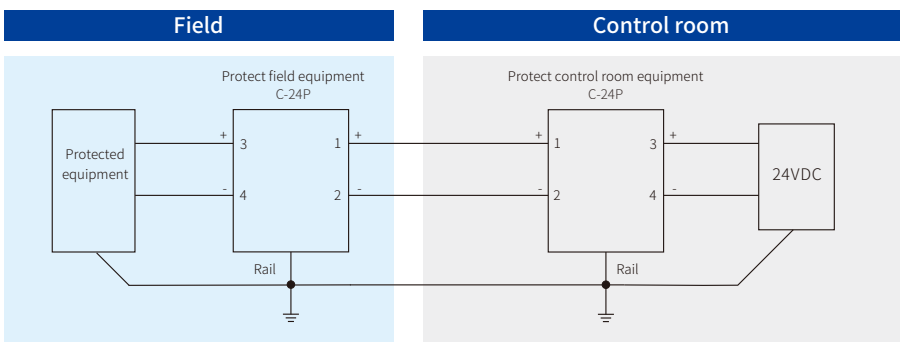


24VDC	
Max. Continuous operating voltage Uc	58VDC/40VAC
Nominal operating current In	10A
Nominal discharge current In (8/20μs)	10kA
Max. discharge current Imax (8/20μs)	20kA
Impulse discharge current Iimp (10/350μs)	2.5kA
Voltage protection level Up	L-L: 400V/L-G: 600V
Response time	L-L: 25ns/L-G: 100ns
Residual current I _{res}	<20μA
Degree of protection of enclosure(IEC60529)	IP 20
Housing material/ Flammability rating(UL94)	PA66/V0
Testing standard	GB/T 18802.21/IEC 61643-21
Certification	
Type test	Shanghai lightning protection center
Order number	Push-in: 7065366; Screw: 7077701

Dimensions



Typical applications



C Series Power SPD

Power SPD protect all electrical devices (e.g. transformer, junction box, inverter, charging pile, wind power generator, UPS, shield tunneling machine, and shore crane)in power supply or distribution system from surge, which is suit for 24VDC , and IT/ TT/ TN-C/ TN-S AC power supply or distribution system.



Customized sign

Customizable and flexible to install

Redundant wiring design

Easy to get V type wiring

Status indication

● Fault / ● Normal

Flameproof and anti-corrosion housing material

V0 flame rating
96H salt mist
2G vibration

Remote alarm

Normally open& close contact
Pluggable connection

Indelible print

Environmental friendly laser inscription

Thinner design

Width 12mm/p
Height 62mm

12mm Power SPD

Features

- Width: 12mm/P
- Status indication:
 - Green: Normal
 - Red: Fault
- Pluggable protection module
- Remote alarm output is optional (named with F)

Technical Data

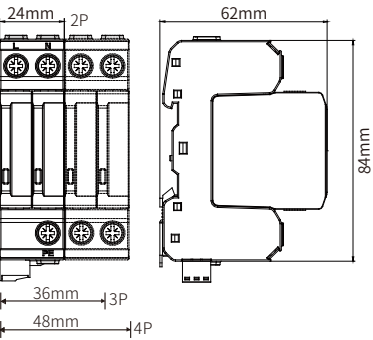
Max. Continuous operating voltage U_c	320VAC	320VAC	320VAC
Nominal discharge current I_n (8/20 μ s)	10kA	10kA	10kA
Max. discharge current I_{max} (8/20 μ s)	20kA	20kA	20kA
Voltage protection level U_p	1.2kV	1.2kV	1.2kV
Recommended backup fuse	40A gG	40A gG	40A gG
Short circuit withstand I_{SCCR} (No external fuse)	1000A	1000A	1000A
Conductor cross section (solid/flexible)	2.5~25mm ² /2.5~16mm ²	2.5~25mm ² /2.5~16mm ²	2.5~25mm ² /2.5~16mm ²
Response time	25ns	25ns	25ns
Residual current I_{PE}	<20 μ A	<20 μ A	<20 μ A
Remote alarm output (with F)	250VAC/0.5A; 24VDC/0.5A	250VAC/0.5A; 24VDC/0.5A	250VAC/0.5A; 24VDC/0.5A
Degree of protection of enclosure(IEC60529)	IP 20	IP 20	IP 20
Housing material/ Flammability rating(UL94)	PA66/V0	PA66/V0	PA66/V0
Testing standard	GB/T 18802.11/IEC 61643-11	GB/T 18802.11/IEC 61643-11	GB/T 18802.11/IEC 61643-11
Suitable for power supply System	TN System(Single phase)	TN-C System(Three phase) IT System(Three phase)	TN-S System(Three phase)

Certification

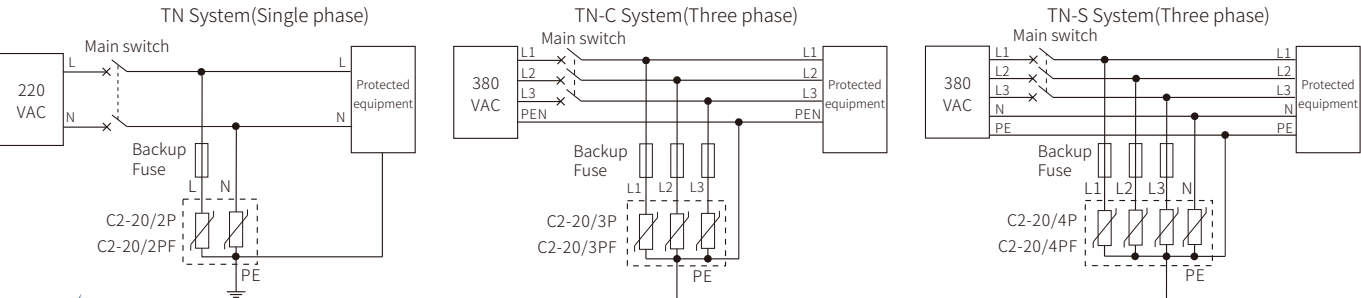
Type test	Shanghai lightning protection center	Shanghai lightning protection center	Shanghai lightning protection center
-----------	--------------------------------------	--------------------------------------	--------------------------------------

Order number	C2-20/2P: 7012025 C2-20/2PF: 7039389	C2-20/3P: 7073441 C2-20/3PF: 7011201	C2-40/4P: 7096735 C2-20/4PF: 7057147
--------------	---	---	---

Dimensions



Typical applications



Cautions:
Backup fuses are recommended to be installed in case SPD gets short-circuited.
For connecting to L/N, cables with a cross-sectional area $\geq 2.5\text{mm}^2$ are recommended.
For connecting to PE, cables with a cross-sectional area $\geq 4\text{mm}^2$ are recommended.

12mm Power SPD

Features

- Width: 12mm/P
- Status indication:
 - Green: Normal
 - Red: Fault
- Pluggable protection module
- Remote alarm output is optional (named with F)

Technical Data

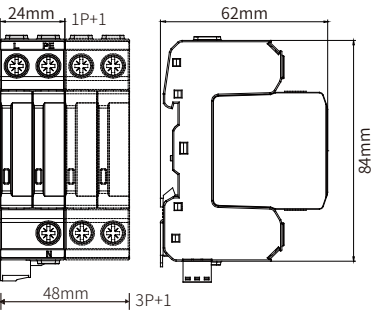
Max. Continuous operating voltage U_c	255VAC	320VAC
Nominal discharge current I_n (8/20 μ s)	20KA	10kA
Max. discharge current I_{max} (8/20 μ s)	40kA	20kA
Voltage protection level U_p	1.5kV	1.2kV
Recommended backup fuse		40A gG
Short circuit withstand I_{SCCR} (No external fuse)		1000A
Conductor cross section (solid/flexible)		2.5~25mm ² /2.5~16mm ²
Response time		25ns
Residual current I_{PE}		<20 μ A
Remote alarm output (with F)		250VAC/0.5A; 24VDC/0.5A
Degree of protection of enclosure(IEC60529)		IP 20
Housing material/ Flammability rating(UL94)		PA66/V0
Testing standard		GB/T 18802.11/IEC 61643-11
Suitable for power supply System		TT System(Single phase)

Certification

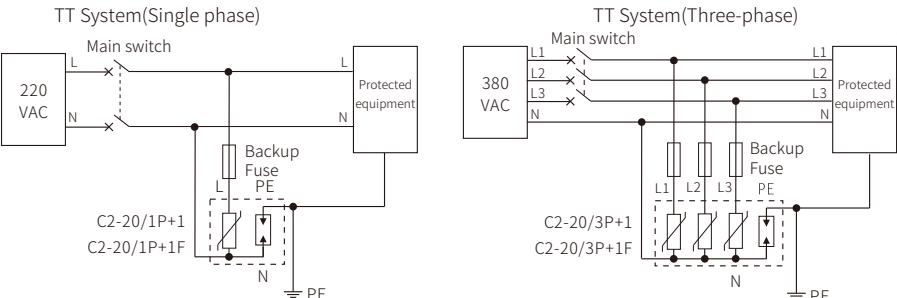
Type test	Shanghai lightning protection center	Shanghai lightning protection center
-----------	--------------------------------------	--------------------------------------

Order number	C2-20/1P+1: 7071193 C2-20/1P+1F: 7019940	C2-20/3P+1: 7015727 C2-20/3P+1F: 7046918
--------------	---	---

Dimensions



Typical applications



Cautions:
Backup fuses are recommended to be installed in case SPD gets short-circuited.
For connecting to L/N, cables with a cross-sectional area $\geq 2.5\text{mm}^2$ are recommended.
For connecting to PE, cables with a cross-sectional area $\geq 4\text{mm}^2$ are recommended.

12mm Power SPD

Features

- Width: 12mm/P
- Status indication:
 - Green: Normal
 - Red: Fault
- Pluggable protection module
- Remote alarm output is optional (named with F)

Technical Data

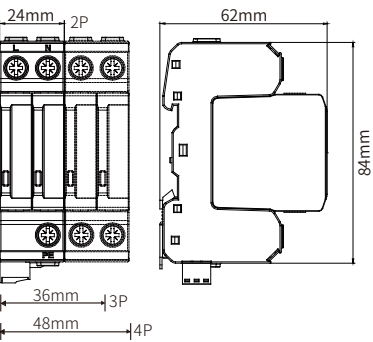
Max. Continuous operating voltage U_c	385VAC	385VAC	385VAC
Nominal discharge current I_n (8/20 μ s)	20kA	20kA	20kA
Max. discharge current I_{max} (8/20 μ s)	40kA	40kA	40kA
Voltage protection level U_p	1.7kV	1.7kV	1.7kV
Recommended backup fuse	80A gG	80A gG	80A gG
Short circuit withstand I_{SCCR} (No external fuse)	1000A	1000A	1000A
Conductor cross section (solid/flexible)	4~25mm ² /4~16mm ²	4~25mm ² /4~16mm ²	4~25mm ² /4~16mm ²
Response time	25ns	25ns	25ns
Residual current I_{PE}	<20 μ A	<20 μ A	<20 μ A
Remote alarm output (with F)	250VAC/0.5A; 24VDC/0.5A	250VAC/0.5A; 24VDC/0.5A	250VAC/0.5A; 24VDC/0.5A
Degree of protection of enclosure(IEC60529)	IP 20	IP 20	IP 20
Housing material/ Flammability rating(UL94)	PA66/V0	PA66/V0	PA66/V0
Testing standard	GB/T 18802.11/IEC 61643-11	GB/T 18802.11/IEC 61643-11	GB/T 18802.11/IEC 61643-11
Suitable for power supply System	TN System(Single phase)	TN-C System(Three phase) IT System(Three phase)	TN-S System(Three phase)

Certification

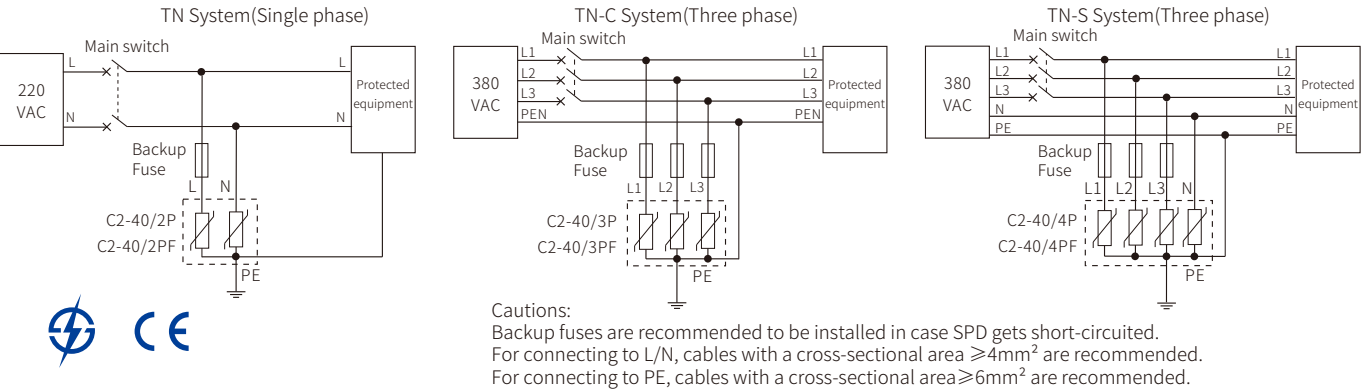
Type test	Shanghai lightning protection center	Shanghai lightning protection center	Shanghai lightning protection center
-----------	--------------------------------------	--------------------------------------	--------------------------------------

Order number	C2-40/2P: 7078245 C2-40/2PF: 7090181	C2-40/3P: 7056563 C2-40/3PF: 7088561	C2-40/4P: 7067406 C2-40/4PF: 7021880
--------------	---	---	---

Dimensions



Typical applications



12mm Power SPD

Features

- Width: 12mm/P
- Status indication:
 - Green: Normal
 - Red: Fault
- Pluggable protection module
- Remote alarm output is optional (named with F)

Technical Data

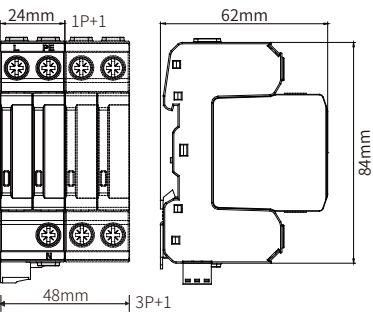
Max. Continuous operating voltage U_c	255VAC	385VAC
Nominal discharge current I_n (8/20 μ s)	20KA	20kA
Max. discharge current I_{max} (8/20 μ s)	40kA	40kA
Voltage protection level U_p	1.5kV	1.7kV
Recommended backup fuse		80A gG
Short circuit withstand I_{SCCR} (No external fuse)		1000A
Conductor cross section (solid/flexible)		4~25mm ² /4~16mm ²
Response time		25ns
Residual current I_{PE}		<20 μ A
Remote alarm output (with F)		250VAC/0.5A; 24VDC/0.5A
Degree of protection of enclosure(IEC60529)		IP 20
Housing material/ Flammability rating(UL94)		PA66/V0
Testing standard		GB/T 18802.11/IEC 61643-11
Suitable for power supply System		TT System(Single phase)

Certification

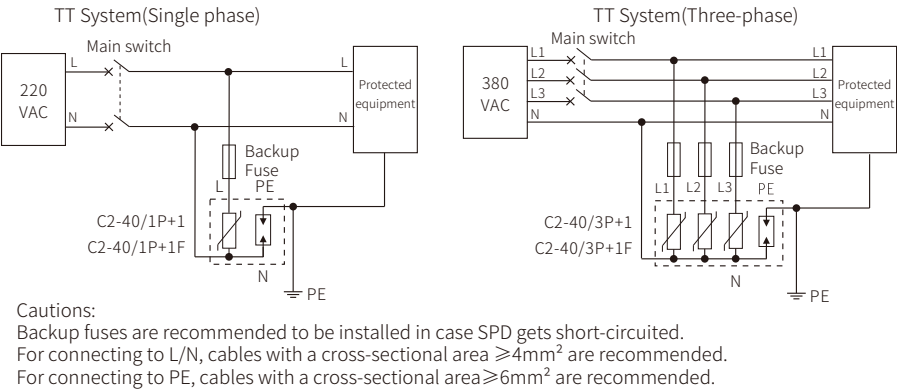
Type test	Shanghai lightning protection center
-----------	--------------------------------------

Order number	C2-40/1P+1: 7091735 C2-40/1P+1F: 7053423
--------------	---

Dimensions



Typical applications



12mm Power SPD

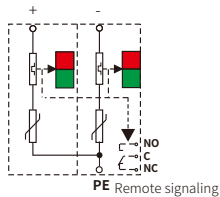
Features

- Width: 12mm/P
- Status indication :
 - Green: Normal
 - Red: Fault
- Pluggable protection module
- Suitable for high-power circuit
- Remote alarm output is optional (named with F)

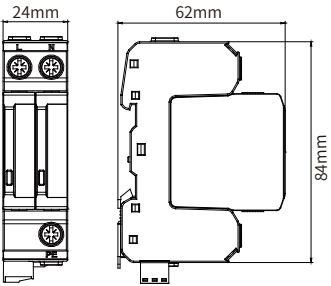
Technical Data	
Max. Continuous operating voltage Uc	90VDC/60VAC
Nominal discharge current In (8/20μs)	20kA
Max. discharge current Imax (8/20μs)	40kA
Voltage protection level Up	0.6kV
Recommended backup fuse	80A gG
Short circuit withstand I _{SCCR} (No external fuse)	1000A
Conductor cross section (solid/flexible)	4~25mm ² /4~16mm ²
Response time	25ns
Residual current I _{PE}	<20μA
Remote alarm output (with F)	250VAC/0.5A; 24VDC/0.5A
Degree of protection of enclosure(IEC60529)	IP 20
Housing material/ Flammability rating(UL94)	PA66/V0
Testing standard	GB/T 18802.11/IEC 61643-11
Certification	
Type test	Shanghai lightning protection center
Order number	
	C2-24: 7097742
	C2-24F: 7018876

C2-24

C2-24F

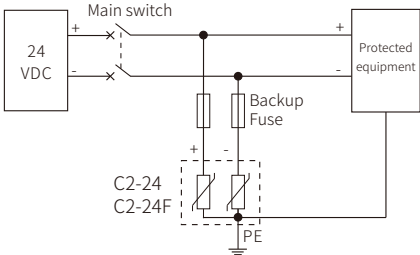


Dimensions



62mm×84mm×24mm

Typical applications



Cautions:
Backup fuses are recommended to be installed in case SPD gets short-circuited.
For connecting to L/N, cables with a cross-sectional area $\geq 4\text{mm}^2$ are recommended.
For connecting to PE, cables with a cross-sectional area $\geq 6\text{mm}^2$ are recommended.

