NEWPWR
优 倍 电 气

Surge Protection Device

Product Catalogue & Technical Brochure (2023)

www.anpe.cn

NEWPWR
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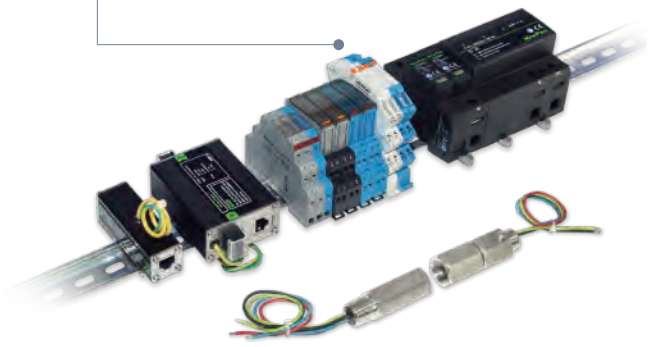
Integrating the latest technologies

Signal, Power, Cmmunication SPD

Made in Germany



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Core technology-Signal SPD

- Proprietary - hot plugging
- Proprietary - reliable grounding technology
- German EPCOS and other imported components
- Color identification mode (indicator)

Core technology-Power SPD

- High quality enclosure
- Integrated glue filling technology
- Reliable thermo disconnect device
- Support hot plugging
- Status indicator, remote alarm
- Patented large arc extinguisher technology

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- Intrinsic Safety barrier National Standard Editor in chief
- SINOPEC Intrinsic Safety Barriers Framework Agreement Unit
- Integration of industrialization and informatization unit of MIIT
- Standardization demonstration intelligent factory of MIIT
- Jiangsu Province Surge Protective Device Engineering and Technology Research Center

智造园区：南京市江宁区金鑫中路19号（江宁开发区）

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About NewPwr

Nanjing New Power Electric Co.,Ltd. was founded in 2002, is the high-tech enterprise in Jiangsu Province. Our company is specialized in R&D, manufacturing intrinsic safety barrier, surge protective device etc, and is a member of the national industrial process measurement and automation Standardization Technical Committee (TC124), national industrial explosion-proof electrical equipment standardization technical committee (TC9). The company has more than 160 employees, 33000 square meters of two industrial parks. It is one of the main suppliers of technology and market in the field of industrial explosion-proof instrumentation in China, and enjoys a high reputation.

The company is the executive director unit of Chinese Instrument Association, the integration of industrialization and informatization unit of the MIIT, the standardization demonstration intelligent factory of MIIT, is the Jiangsu Province and Nanjing first demonstration of intelligent workshop. Due to the outstanding achievements of the company in recent years, since 2016, it has been awarded by Jiangsu provincial government as one of the "100 outstanding enterprise in Jiangsu Province", "50 outstanding Jiangsu Manufacturing Contributions Outstanding Enterprises", and "Jiangsu Science and Technology Little Giant Enterprise" honor.






Contents

New energy

Petroleum and petrochemical

Security monitoring

power grid

Failure Modes, Effects and Diagnostic Analysis

Project:
Surge Protective Devices KS-FLS-2

Customer:
Nanjing New Power Co., Ltd.
Nanjing
China

Contract No.: 16/12-066
Report No.: NEWPWR 16/12-066 R001
Version V1, Revision R0; December 2016
Stephan Aschenbrenner

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx DEK 17.0009X	Issue No: 0	Certificate history: Issue No. 0 (2017-04-20)
Status:	Current	Page 1 of 3	
Date of Issue:	2017-04-20		
Applicant:	Nanjing New Power Electric Co.,Ltd. Tianyuan Middle Road 126 Luhe Economic Development Zone Nanjing City Jiangsu Province China 211500 China		
Equipment: *Optional accessory:*	Surge Suppression Device Type KS-FLS-2-24.Ex		
Type of Protection:	Ex i		
Marking:	Ex ia [ia Ga] IIC T4...T6 Gb		

Approved for issue on behalf of the IECEx Certification Body: R. Schuller

Position: Certification Manager

Signature: (for printed version)

Date: 2017-04-20

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

DEKRA Certification B.V.
Meander 1051,
6825 MJ Arnhem
The Netherlands

DEKRA

CERTIFICATE

EU-Type Examination

(1)

(2) **Equipment or protective systems intended for use in potentially explosive atmospheres - Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number: **DEKRA 17ATEX0029 X** Issue Number: **0**

(4) Product: **Surge Suppression Device Type KS-FLS-2-24.Ex**

(5) Manufacturer: **Nanjing New Power Co., Ltd**

(6) Address: **Tianyuan Middle Road No. 126, Nanjing, China**

(7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) DEKRA Certification B.V., Notified Body number 0344 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential test report number NL/DEK/ExTR17.0017/00..

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0 : 2012 **EN 60079-11 : 2012** **EN 60079-26 : 2007**

except in respect of those requirements listed at item 18 of the Schedule.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

(12) The marking of the product shall include the following:

II 2(1) G **Ex ia [ia Ga] IIC T4,T5,T6 Gb**

Date of certification: 21 April 2017

DEKRA Certification B.V.

R. Schuller
Certification Manager

DEKRA Certification B.V. Meander 1051, 6825 MJ Arnhem P.O. Box 5185, 6802 ED Arnhem The Netherlands
T +31 88 96 83000 F +31 88 96 83100 www.dekra-certification.com Registered Arnhem 09085396

ZERTIFIKAT ◆ CERTIFICATE ◆ 認証証書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

Product Service

CERTIFICATE

No. B 17 06 99674 002

Holder of Certificate: **Nanjing New Power Electric Co., Ltd.**
6F, 1 Building
Tianyuan Middle Road No.126, Jiangning District
211112 Nanjing City, Jiangsu Province
PEOPLE'S REPUBLIC OF CHINA

Certification Mark:

Product: **Surge protection equipment (Surge Protective Device)**

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition the certification holder must not transfer the certificate to third parties. See also notes overleaf.

Test report no.: 682301506702B

Valid until: 2022-01-16

Date, 2017-06-07 (Alex Kong)

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TÜV SÜD Product Service GmbH · Zertifizierstelle · Ridlerstraße 65 · 80339 München · Germany

CERTIFICATE OF COMPLIANCE

Certificate Number	20181211-E504418
Report Reference	E504418-20181129
Issue Date	2018-DECEMBER-11
Issued to:	NAN JING NEW POWER ELECTRIC CO LTD 6 Floor, Building 1, New Space Development CenterNo.126 Tianyuan Middle Road, Jiang Ning District NanjingCNJiangsuCN210000
This certificate confirms that representative samples of	SURGE-PROTECTIVE DEVICES - COMPONENT For models refer to Addendum Page
	Have been investigated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.
Standard(s) for Safety:	UL 1449 : Surge Protective Devices.
Additional Information:	See the UL Online Certifications Directory at https://iq.ulprospector.com for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Recognized Component Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.

Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at http://ul.com/aboutul/locations/

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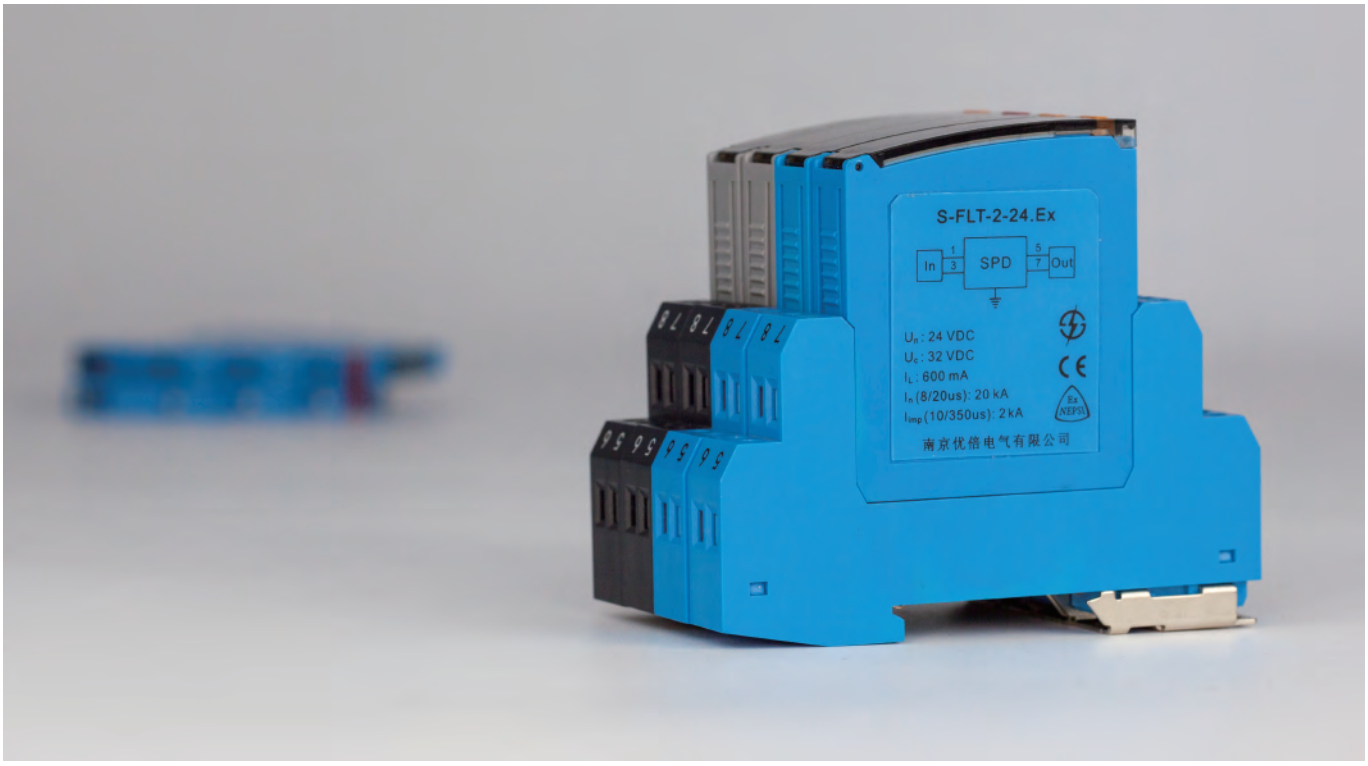
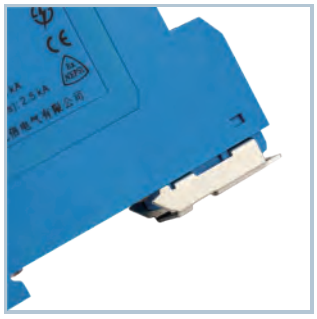
S-FLT serial Surge Protection Device

It can provide surge protection for field equipments such as sensors, transmitters, flow meters, solenoid valves, thermocouples, thermal resistance, devices with RS485 or RS232 interface and for I/O interfaces such as AI, AO, DI, DO, TI, PI in PLC, DCS, FGS, ESD control systems.
It was widely used in petrochemical, gas and new energy industries.





Selection Guide

S-FLT Series Signal SPD---Selection Guide

Signal Type	SPD Mode	Nomimal Voltage Un	Nomimal Current I_L	Max. Discharge Current Imax (8/20μs) , C2	System	Page
0(4)~20mA、0~10V,etc. analog signal	S-FLT-2-24.Ex	24 V	600 mA	20 kA	2-wire	04
	S-FLT-2D-24.Ex	24 V	600 mA	20 kA	2-channel	06
	S-FLT-3-24.Ex	24 V	600 mA	20 kA	3-wire	08
	S-FLT-2D-24G.Ex	24 V	600 mA	20 kA	2-channel	10
	S-FLT-2-24	24 V	850 mA	20 kA	2-wire	13
	S-FLT-2-24G	24 V	850 mA	20 kA	2-wire	14
	S-FLT-2D-24	24 V	850 mA	20 kA	2-channel	17
	S-FLT-2D-24G	24 V	850 mA	20 kA	2-channel	18
	S-FLT-3-24	24 V	850 mA	20 kA	3-wire	21
	S-FLT-3-24G	24 V	850 mA	20 kA	3-wire	22
Thermocouple 、thermal resistance, etc.	S-FLT-2-5.Ex	5 V	600 mA	20 kA	2-wire	03
	S-FLT-2D-5.Ex	5 V	600 mA	20 kA	2-channel	05
	S-FLT-3-5.Ex	5 V	600 mA	20 kA	3-wire	07
	S-FLT-2D-5G.Ex	5 V	600 mA	20 kA	2-channel	09
	S-FLT-2-5	5 V	850 mA	20 kA	2-wire	11
	S-FLT-2-5G	5 V	850 mA	20 kA	2-wire	12
	S-FLT-2D-5	5 V	850 mA	20 kA	2-channel	15
	S-FLT-2D-5G	5 V	850 mA	20 kA	2-channel	16
	S-FLT-3-5	5 V	850 mA	20 kA	3-wire	19
	S-FLT-3-5G	5 V	850 mA	20 kA	3-wire	20
Switch(digital), etc.	S-FLT-2-24.Ex	24 V	600 mA	20 kA	2-wire	04
	S-FLT-2D-24.Ex	24 V	600 mA	20 kA	2-channel	06
	S-FLT-2D-24G.Ex	24 V	600 mA	20 kA	2-channel	10
	S-FLT-2-24	24 V	850 mA	20 kA	2-wire	13
	S-FLT-2-24G	24 V	850 mA	20 kA	2-wire	14
	S-FLT-2D-24	24 V	850 mA	20 kA	2-channel	17
	S-FLT-2D-24G	24 V	850 mA	20 kA	2-channel	18
RS-485、MODBUS、PROFIBUS-DP、CAN, etc.	S-FLT-2-5.Ex	5 V	600 mA	20 kA	2-wire	03
	S-FLT-2D-5.Ex	5 V	600 mA	20 kA	2-channel	05
	S-FLT-2D-5G.Ex	5 V	600 mA	20 kA	2-channel	09
	S-FLT-2-5	5 V	850 mA	20 kA	2-wire	11
	S-FLT-2-5G	5 V	850 mA	20 kA	2-wire	12
	S-FLT-2D-5	5 V	850 mA	20 kA	2-channel	15
	S-FLT-2D-5G	5 V	850 mA	20 kA	2-channel	16
RS-232	S-FLT-3-24.Ex	24 V	600 mA	20 kA	3-wire	08
	S-FLT-3-24	24 V	850 mA	20 kA	3-wire	21
RS-422	S-FLT-3-5.Ex	5 V	600 mA	20 kA	3-wire	07
	S-FLT-3-5	5 V	850 mA	20 kA	3-wire	19
	S-FLT-3-5G	5 V	850 mA	20 kA	3-wire	20
Power supply	S-FLT-2-24D	24 V	10A	20 kA	2-wire	23

Features

- 2 line system
- Intrinsically safe 5V signal system
- Max. impulse current 20 kA(8/20 μs)
- plug in gold plating
- 12.4 mm,hot plugging
- 35 mm rail installation

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

It can be applied to 2 wire RTD, TC, RS-485, MODBUS, PROFIBUS-DP, CAN and other products.

Parameter

Nominal voltage Un	5 V
Max. continuous operating voltage Uc(DC)	6 V
Max. continuous operating voltage Uc(AC)	4 V
Nominal current I_L	600 mA
Total lightning impulse current Iimp(10/350 μs),D1	5 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤45 V/ L-PE≤550 V
Voltage protection level Up(1 kV/μs), C3	L-L≤15 V/ L-PE≤550 V
Bandwidth fG(100 Ω resistance)	100 MHz
Series impedance	1 Ω
Response time Ta	<1 ns
Intrinsically safe circuit certification	Ex ia II C T6 Ga
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Grounding rail
Connecting wire size	0.2 mm² ~ 2.5 mm²
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

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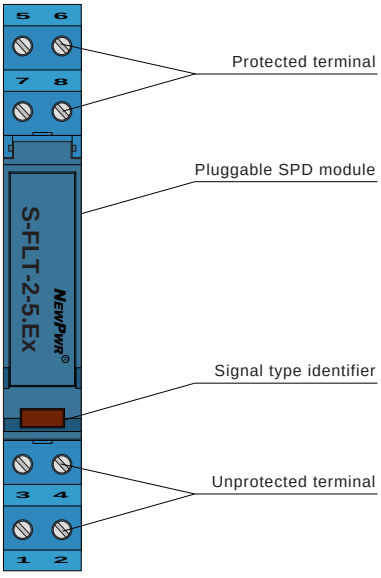

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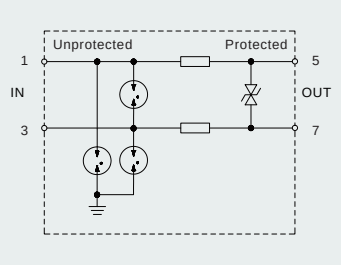

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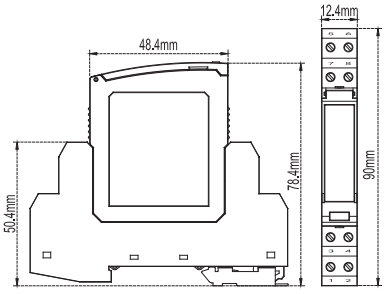

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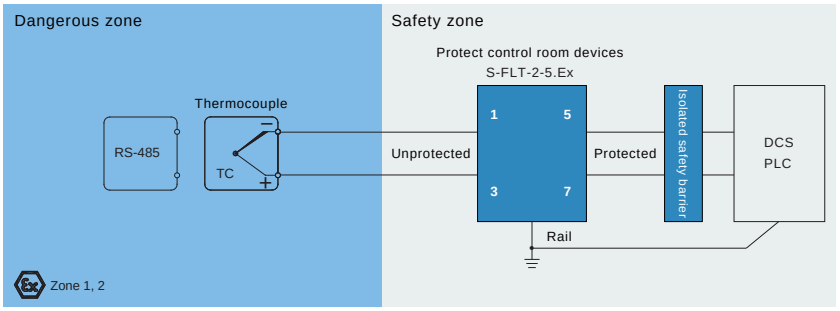

Features

- 2 line system
- Intrinsically safe 24V signal system
- Max. impulse current 20 kA(8/20 μs)
- plug in gold plating
- 12.4 mm,hot plugging
- 35 mm rail installation

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

It can be applied to 2-wire pressure transmitter, valve positioner, electrical converter, flowmeter, solenoid valve and other field instruments and FF, PROFIBUS PA ect.

Parameter

Nominal voltage Un	24 V
Max. continuous operating voltage Uc(DC)	32 V
Max. continuous operating voltage Uc(AC)	22.5 V
Nominal current I_L	600 mA
Total lightning impulse current Iimp(10/350 μs),D1	5 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤60 V/ L-PE≤550 V
Voltage protection level Up(1 kV/μs), C3	L-L≤45 V/ L-PE≤550 V
Bandwidth fG(100 Ω resistance)	10 MHz
Series impedance	1 Ω
Response time Ta	<1 ns
Intrinsically safe circuit certification	Ex ia II C T6 Ga
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Grounding rail
Connecting wire size	0.2 mm² ~ 2.5 mm²
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

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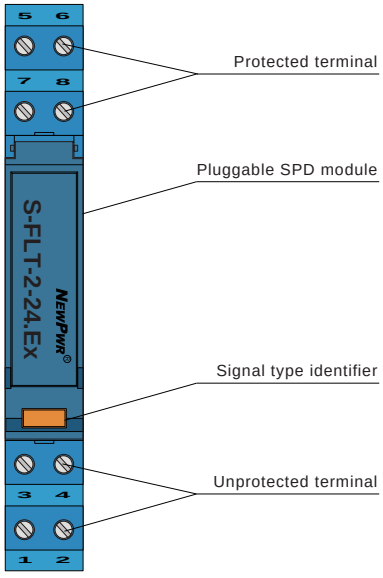

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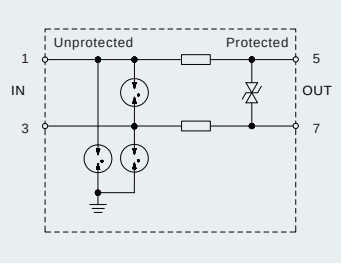

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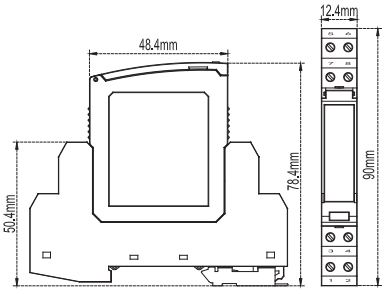
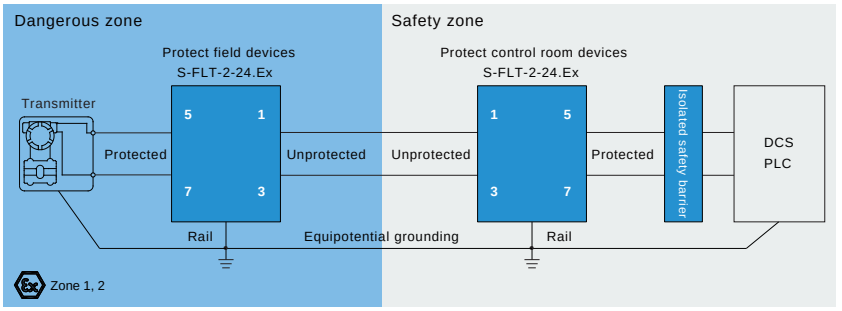


Application



Features

- 2-channel system
- Intrinsically safe 5V signal system
- Max. impulse current 20 kA(8/20 μs)
- plug in gold plating
- 12.4 mm,hot plugging
- 35 mm rail installation

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

It can be applied to 2 wire RTD, TC, RS-485, MODBUS, PROFIBUSDP, CAN ect.

Parameter

Nominal voltage Un	5 V
Max. continuous operating voltage Uc(DC)	6 V
Max. continuous operating voltage Uc(AC)	4 V
Nominal current I_L	600 mA
Total lightning impulse current Iimp(10/350 μs),D1	10 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤45 V/ L-PE≤550 V
Voltage protection level Up(1 kV/μs), C3	L-L≤15 V/ L-PE≤550 V
Bandwidth fG(100 Ω resistance)	100 MHz
Series impedance	1 Ω
Response time Ta	<1 ns
Intrinsically safe circuit certification	Ex ia II C T6 Ga
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Grounding rail
Connecting wire size	0.2 mm² ~ 2.5 mm²
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

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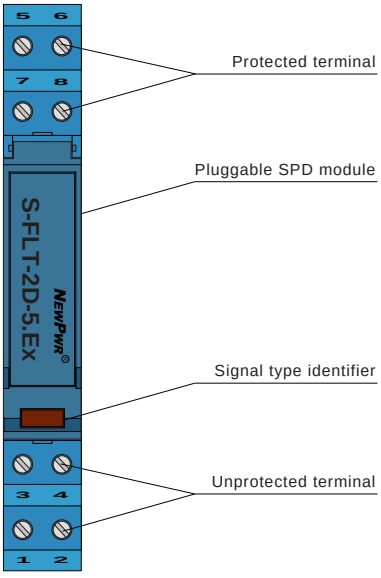

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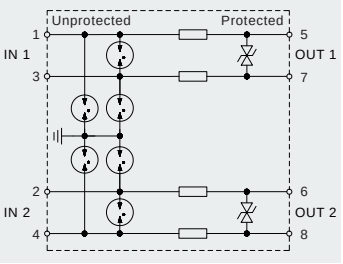

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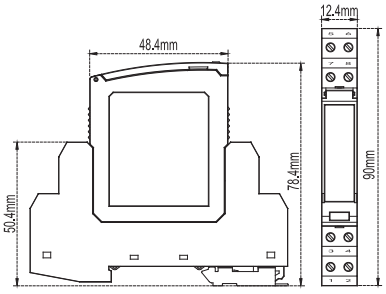
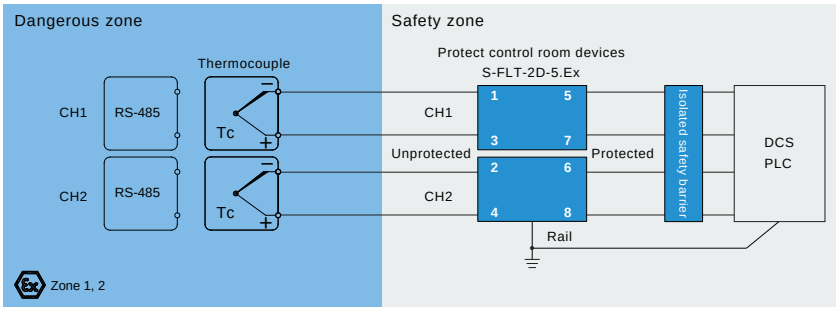


Application



Features

- 2-channel system
- Intrinsically safe 24V signal system
- Max. impulse current 20 kA(8/20 μs)
- plug in gold plating
- 12.4 mm,hot plugging
- 35 mm rail mounted

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

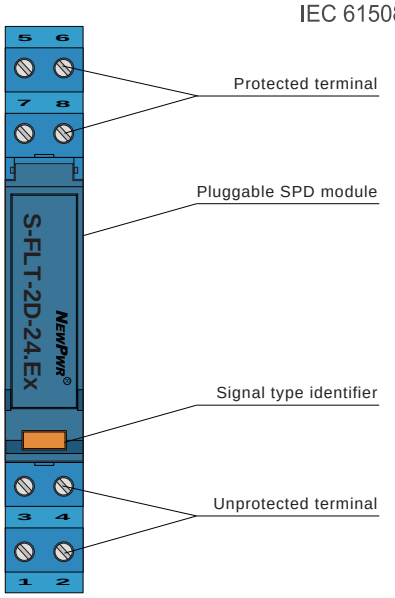
It can be applied to 2-wire pressure transmitter, valve positioner, electrical converter, flowmeter, solenoid valve and other field instruments and FF, PROFIBUS PA ect.

Parameter

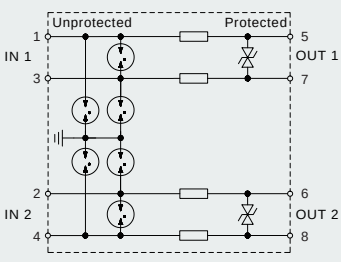
Nominal voltage Un	24 V
Max. continuous operating voltage Uc(DC)	32 V
Max. continuous operating voltage Uc(AC)	22.5 V
Nominal current I_L	600 mA
Total lightning impulse current Iimp(10/350 μs),D1	10 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤60 V/ L-PE≤550 V
Voltage protection level Up(1 kV/μs), C3	L-L≤45 V/ L-PE≤550 V
Bandwidth fG(100 Ω resistance)	10 MHz
Series impedance	1 Ω
Response time Ta	<1 ns
Intrinsically safe circuit certification	Ex ia II C T6 Ga
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Grounding rail
Connecting wire size	0.2 mm² ~ 2.5 mm²
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

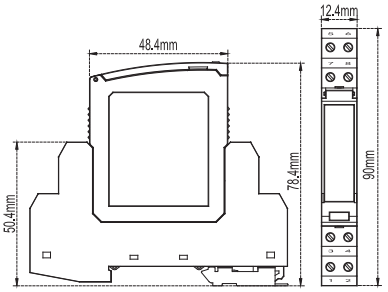
SIL3
IEC 61508



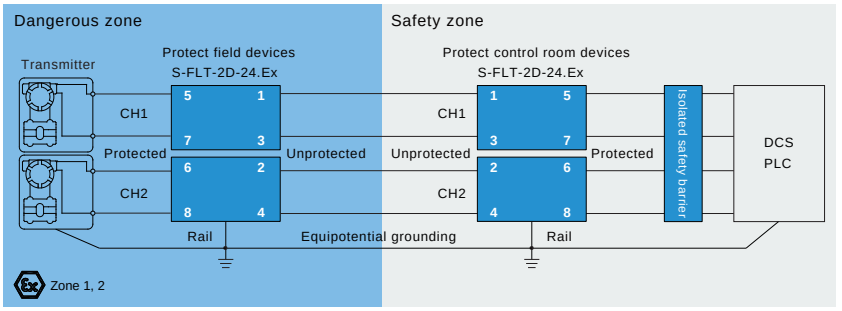
Schematic



Dimensions



Application



Features

- 3 line system
- Intrinsically safe 5V signal system
- Max. impulse current 20 kA(8/20 μs)
- plug in gold plating
- 12.4 mm,hot plugging
- 35 mm rail installation

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

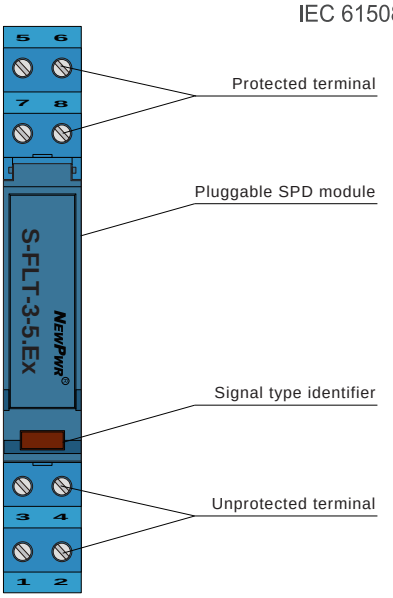
It can be applied to 3 or 4 wire RTD, RS-422 ect.

Parameter

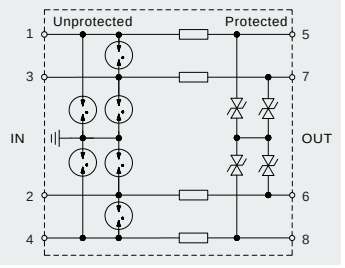
Nominal voltage Un	5 V
Max. continuous operating voltage Uc(DC)	6 V
Max. continuous operating voltage Uc(AC)	4 V
Nominal current I_L	600 mA
Total lightning impulse current Iimp(10/350 μs),D1	10 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤45 V/ L-PE≤550 V
Voltage protection level Up(1 kV/μs), C3	L-L≤15 V/ L-PE≤550 V
Bandwidth fG(100 Ω resistance)	1 MHz
Series impedance	1 Ω
Response time Ta	<1 ns
Intrinsically safe circuit certification	Ex ia II C T6 Ga
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Grounding rail
Connecting wire size	0.2 mm² ~ 2.5 mm²
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

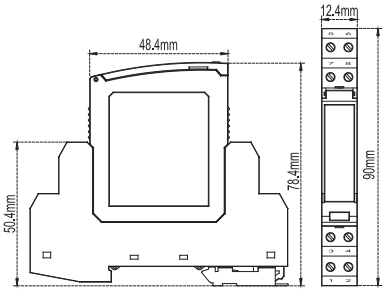
SIL3
IEC 61508



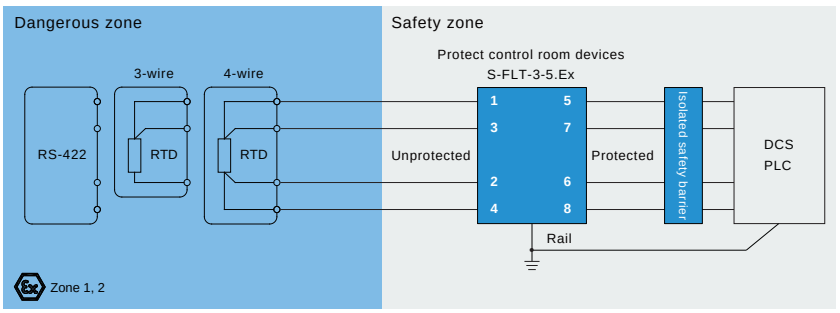
Schematic



Dimensions



Application



Features

- 3 line system
- Intrinsically safe 24V signal system
- Max. impulse current 20 kA(8/20 μs)
- plug in gold plating
- 12.4 mm,hot plugging
- 35 mm rail installation

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

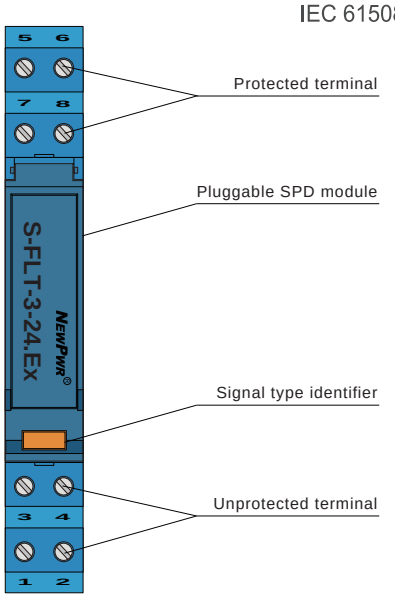
It can be applied to 3 or 4 transmitter, RS-232 ect.

Parameter

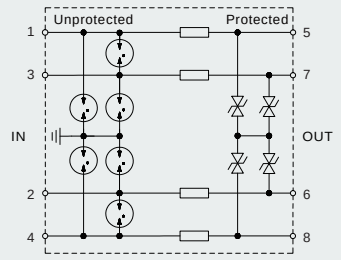
Nominal voltage Un	24 V
Max. continuous operating voltage Uc(DC)	32 V
Max. continuous operating voltage Uc(AC)	22.5 V
Nominal current I_L	600 mA
Total lightning impulse current Iimp(10/350 μs),D1	10 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤60 V/ L-PE≤550 V
Voltage protection level Up(1 kV/μs), C3	L-L≤45 V/ L-PE≤550 V
Bandwidth fG(100 Ω resistance)	7 MHz
Series impedance	1 Ω
Response time Ta	<1 ns
Intrinsically safe circuit certification	Ex ia II C T6 Ga
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Grounding rail
Connecting wire size	0.2 mm^2 ~ 2.5 mm^2
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

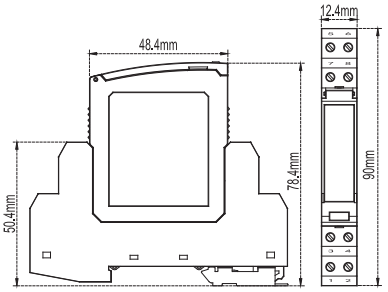
SIL3
IEC 61508



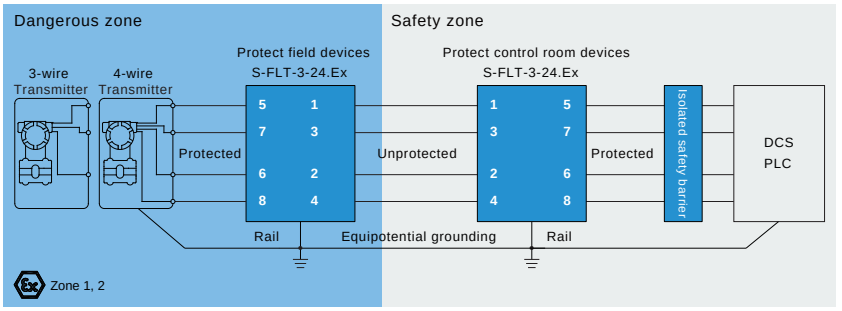
Schematic



Dimensions



Application



Features

- 2-channel system
- Intrinsically safe 5V signal system
- Max. impulse current 20 kA(8/20 μs)
- plug in gold plating
- 12.4 mm,hot plugging
- 35 mm rail installation

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

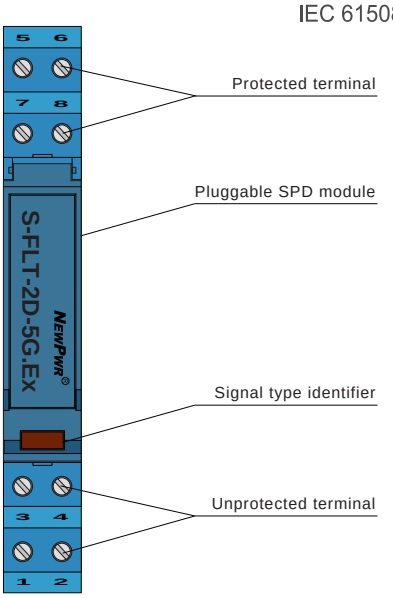
It can be applied to 2 wire RTD, TC, RS-485, MODBUS, PROFIBUSDP, CAN ect.

Parameter

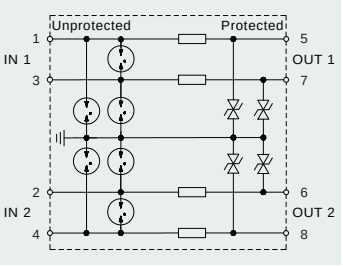
Nominal voltage Un	5 V
Max. continuous operating voltage Uc(DC)	6 V
Max. continuous operating voltage Uc(AC)	4 V
Nominal current I_L	600 mA
Total lightning impulse current Iimp(10/350 μs),D1	10 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤45 V/ L-PE≤45 V
Voltage protection level Up(1 kV/μs), C3	L-L≤15 V/ L-PE≤15 V
Bandwidth fG(100 Ω resistance)	100 MHz
Series impedance	1 Ω
Response time Ta	<1 ns
Intrinsically safe circuit certification	Ex ia II C T6 Ga
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Grounding rail
Connecting wire size	0.2 mm² ~ 2.5 mm²
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

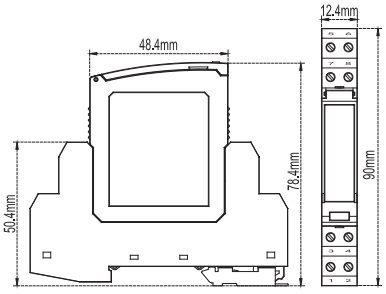
SIL3
IEC 61508



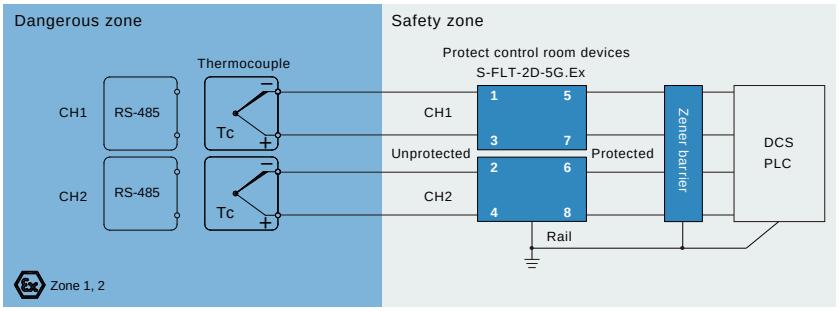
Schematic



Dimensions



Application



Features

- 2-channel system
- Intrinsically safe 24V signal system
- Max. impulse current 20 kA(8/20 μs)
- Plug in gold plating
- 12.4 mm,hot plugging
- 35 mm rail mounted

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

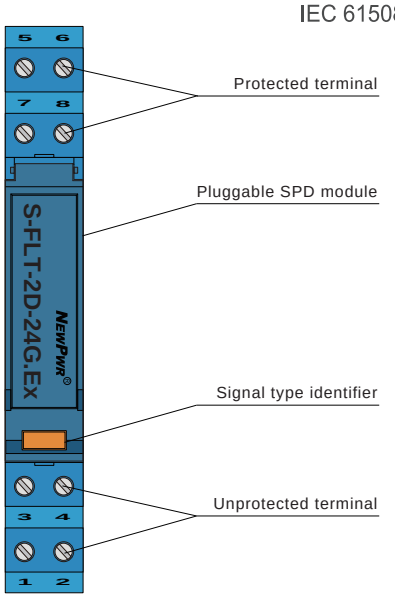
It can be applied to 2-wire pressure transmitter, valve positioner, electrical converter, flowmeter, solenoid valve and other field instruments and FF, PROFIBUS PA ect.

Parameter

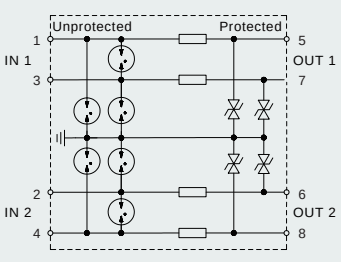
Nominal voltage Un	24 V
Max. continuous operating voltage Uc(DC)	32 V
Max. continuous operating voltage Uc(AC)	22.5 V
Nominal current I_L	600 mA
Total lightning impulse current Iimp(10/350 μs),D1	5 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤60 V/ L-PE≤550 V
Voltage protection level Up(1 kV/μs), C3	L-L≤45 V/ L-PE≤550 V
Bandwidth fG(100 Ω resistance)	10 MHz
Series impedance	1 Ω
Response time Ta	<1 ns
Intrinsically safe circuit certification	Ex ia II C T6 Ga
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Grounding rail
Connecting wire size	0.2 mm² ~ 2.5 mm²
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

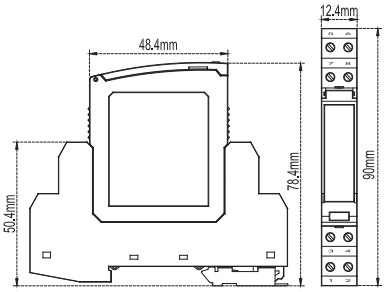
SIL3
IEC 61508



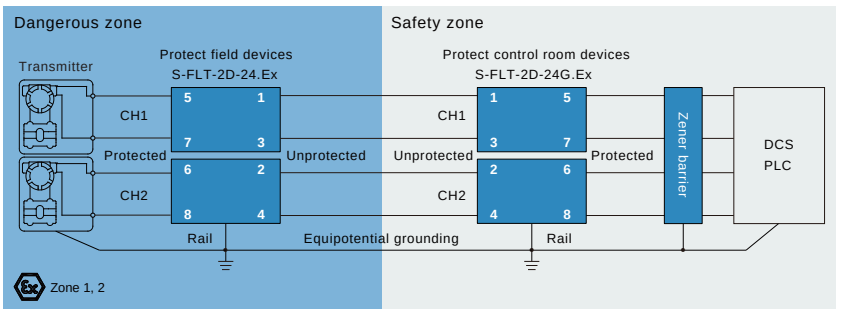
Schematic



Dimensions



Application



Features

- 2-wire system
- 5V signal system
- Max. impulse current 20 kA(8/20 μs)
- Plug in gold plating
- 12.4 mm,hot plugging
- 35 mm rail mounted

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

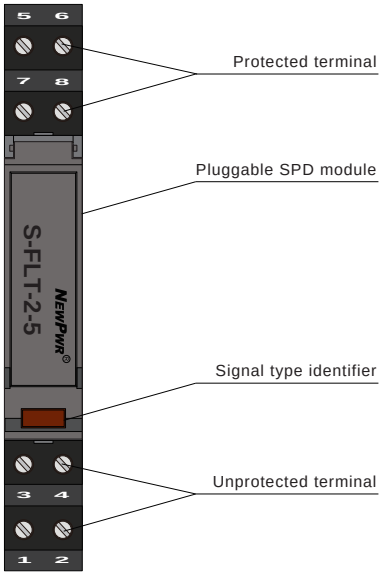
It can be applied to 2 wire RTD, TC, RS-485, MODBUS, PROFIBUSDP, CAN ect.

Parameter

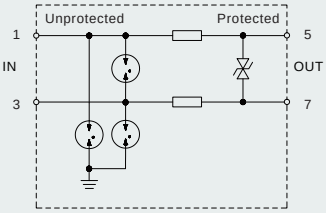
Nominal voltage Un	5 V
Max. continuous operating voltage Uc(DC)	6 V
Max. continuous operating voltage Uc(AC)	4 V
Nominal current I_L	850 mA
Total lightning impulse current Iimp(10/350 μs),D1	5 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤45 V/ L-PE≤550 V
Voltage protection level Up(1 kV/μs), C3	L-L≤15 V/ L-PE≤550 V
Bandwidth fG(100 Ω resistance)	100 MHz
Series impedance	1 Ω
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Grounding rail
Connecting wire size	0.2 mm^2 ~ 2.5 mm^2
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

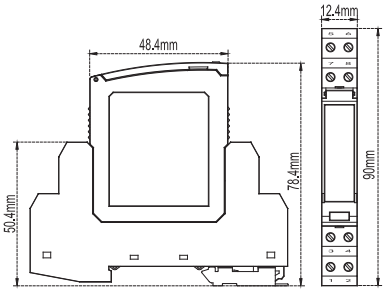
SIL3
IEC 61508



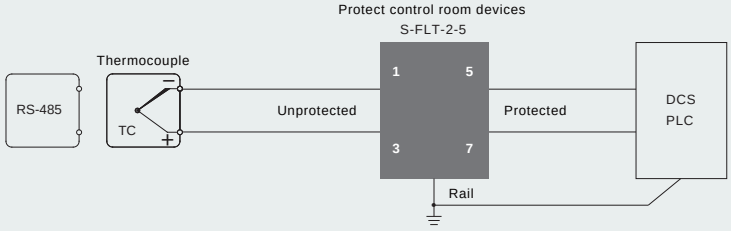
Schematic



Dimensions



Application



Features

- 2-wire system
- 5V signal system
- Max. impulse current 20 kA(8/20 μs)
- Plug in gold plating
- 12.4 mm,hot plugging
- 35 mm rail mounted

Discription

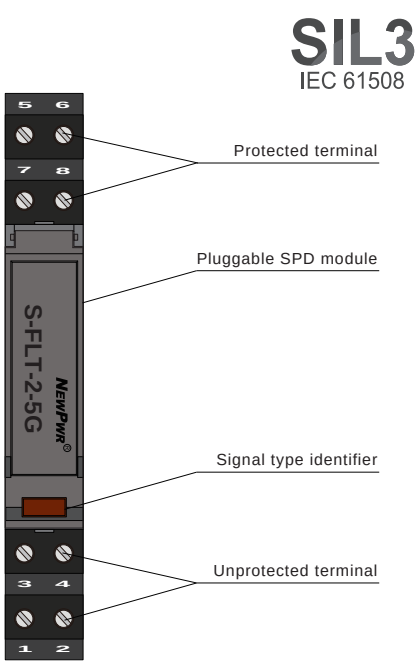
This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

It can be applied to 2 wire RTD, TC, RS-485, MODBUS, PROFIBUSDP, CAN ect.

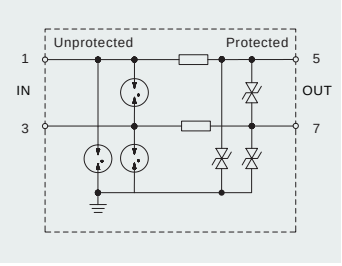
Parameter

Nominal voltage Un	5 V
Max. continuous operating voltage Uc(DC)	6 V
Max. continuous operating voltage Uc(AC)	4 V
Nominal current I_L	850 mA
Total lightning impulse current Iimp(10/350 μs),D1	5 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤45 V/ L-PE≤45 V
Voltage protection level Up(1 kV/μs), C3	L-L≤15 V/ L-PE≤15 V
Bandwidth fG(100 Ω resistance)	100 MHz
Series impedance	1 Ω
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Grounding rail
Connecting wire size	0.2 mm^2 ~ 2.5 mm^2
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

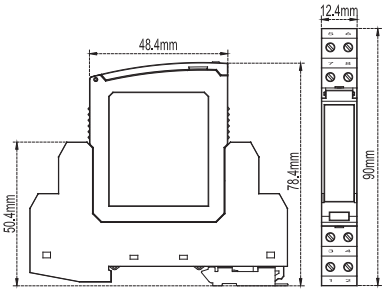
Graphics



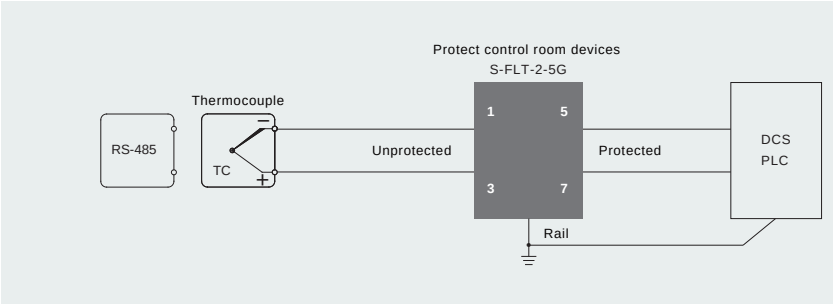
Schematic



Dimensions



Application



Features

- 2-wire system
- 24V signal system
- Max. impulse current 20 kA(8/20 μs)
- Plug in gold plating
- 12.4 mm,hot plugging
- 35 mm rail mounted

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

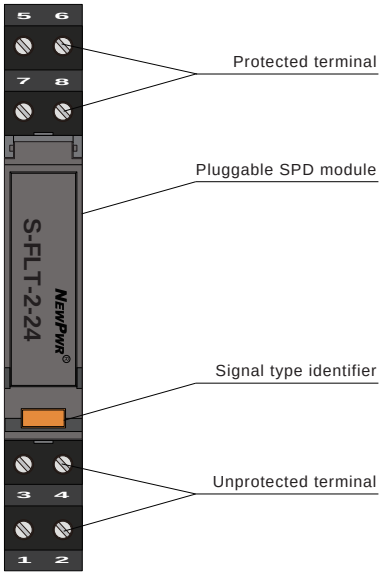
It can be applied to 2-wire pressure transmitter, valve positioner, electrical converter, flowmeter, solenoid valve and other field instruments and FF, PROFIBUS PA ect.

Parameter

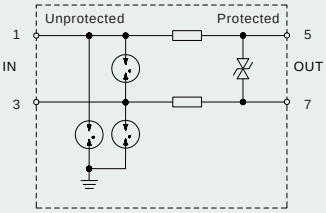
Nominal voltage Un	24 V
Max. continuous operating voltage Uc(DC)	32 V
Max. continuous operating voltage Uc(AC)	22.5 V
Nominal current I_L	850 mA
Total lightning impulse current Iimp(10/350 μs),D1	5 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤60 V/ L-PE≤550 V
Voltage protection level Up(1 kV/μs), C3	L-L≤45 V/ L-PE≤550 V
Bandwidth fG(100 Ω resistance)	10 MHz
Series impedance	1 Ω
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Grounding rail
Connecting wire size	0.2 mm^2 ~ 2.5 mm^2
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

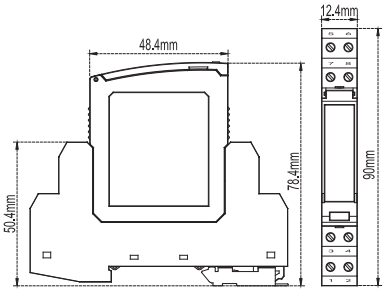
SIL3
IEC 61508



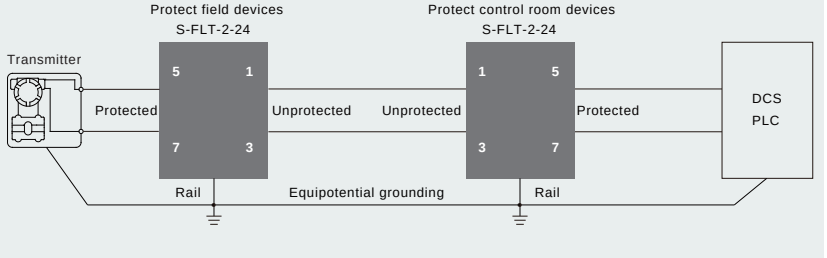
Schematic



Dimensions



Application



Features

- 2-wire system
- 24V signal system
- Max. impulse current 20 kA(8/20 μs)
- Plug in gold plating
- 12.4 mm,hot plugging
- 35 mm rail mounted

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

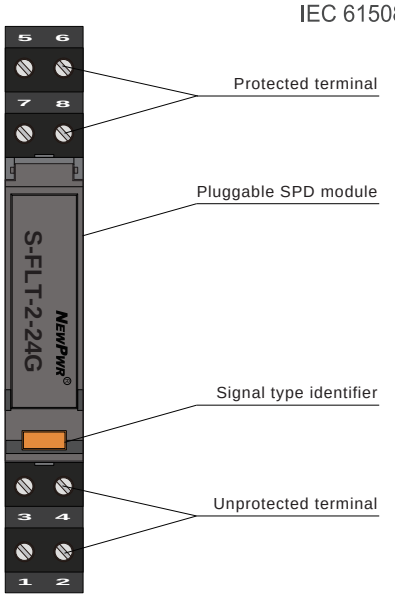
It can be applied to 2-wire pressure transmitter, valve positioner, electrical converter, flowmeter, solenoid valve and other field instruments and FF, PROFIBUS PA ect.

Parameter

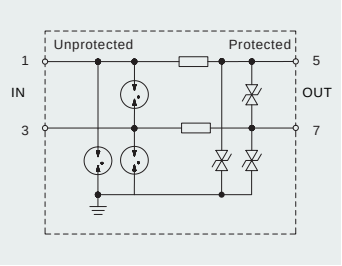
Nominal voltage Un	24 V
Max. continuous operating voltage Uc(DC)	32 V
Max. continuous operating voltage Uc(AC)	22.5 V
Nominal current I_L	850 mA
Total lightning impulse current Iimp(10/350 μs),D1	5 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤60 V/ L-PE≤60 V
Voltage protection level Up(1 kV/μs), C3	L-L≤45 V/ L-PE≤45 V
Bandwidth fG(100 Ω resistance)	10 MHz
Series impedance	1 Ω
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Grounding rail
Connecting wire size	0.2 mm^2 ~ 2.5 mm^2
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

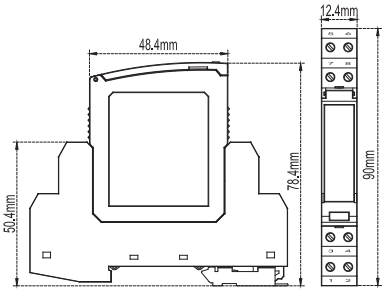
SIL3
IEC 61508



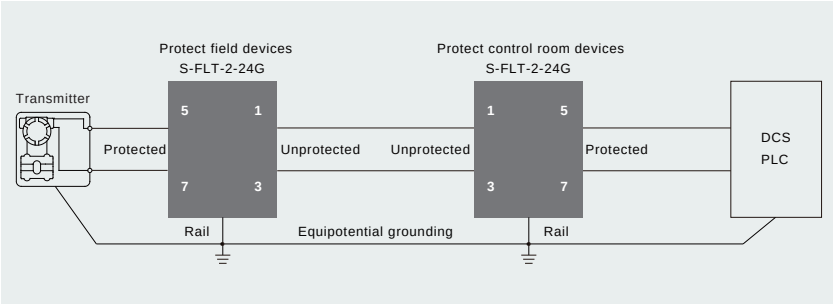
Schematic



Dimensions



Application



Features

- 2-channel system
- 5V signal system
- Max. impulse current 20 kA(8/20 μs)
- Plug in gold plating
- 12.4 mm,hot plugging
- 35 mm rail mounted

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

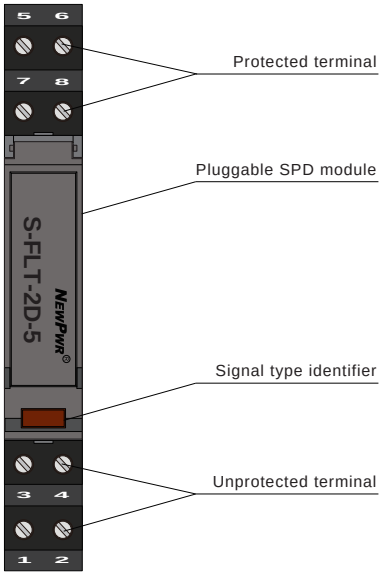
It can be applied to 2 wire RTD, TC, RS-485, MODBUS, PROFIBUSDP, CAN ect.

Parameter

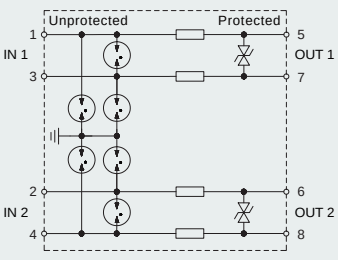
Nominal voltage Un	5 V
Max. continuous operating voltage Uc(DC)	6 V
Max. continuous operating voltage Uc(AC)	4 V
Nominal current I_L	850 mA
Total lightning impulse current Iimp(10/350 μs),D1	10 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤45 V/ L-PE≤550 V
Voltage protection level Up(1 kV/μs), C3	L-L≤15 V/ L-PE≤550 V
Bandwidth fG(100 Ω resistance)	100 MHz
Series impedance	1 Ω
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Grounding rail
Connecting wire size	0.2 mm² ~ 2.5 mm²
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

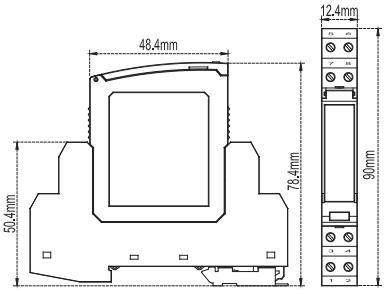
SIL3
IEC 61508



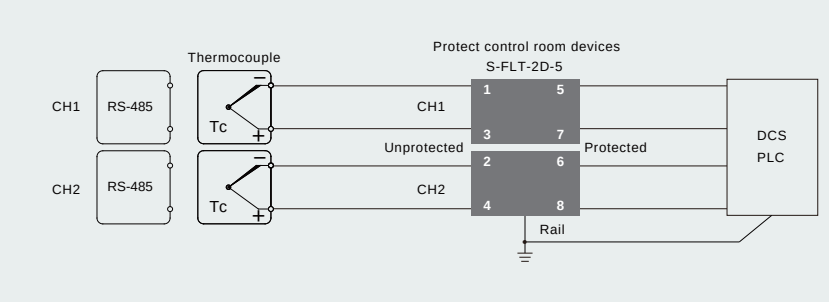
Schematic



Dimensions



Application



Features

- 2-channel system
- 5V signal system
- Max. impulse current 20 kA(8/20 μs)
- Plug in gold plating
- 12.4 mm,hot plugging
- 35 mm rail mounted

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

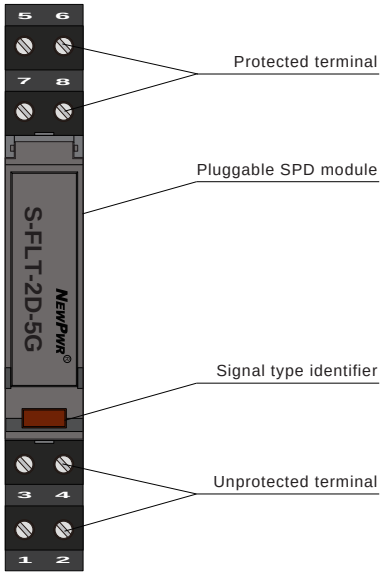
It can be applied to 2 wire RTD, TC, RS-485, MODBUS, PROFIBUSDP, CAN ect.

Parameter

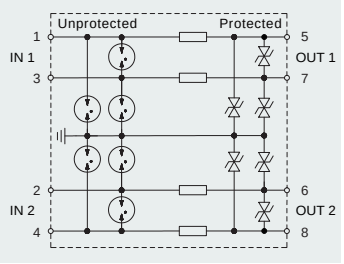
Nominal voltage Un	5 V
Max. continuous operating voltage Uc(DC)	6 V
Max. continuous operating voltage Uc(AC)	4 V
Nominal current I_L	850 mA
Total lightning impulse current Iimp(10/350 μs),D1	10 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤45 V/ L-PE≤45 V
Voltage protection level Up(1 kV/μs), C3	L-L≤15 V/ L-PE≤15 V
Bandwidth fG(100 Ω resistance)	100 MHz
Series impedance	1 Ω
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Grounding rail
Connecting wire size	0.2 mm^2 ~ 2.5 mm^2
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

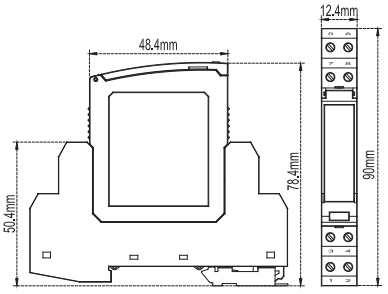
SIL3
IEC 61508



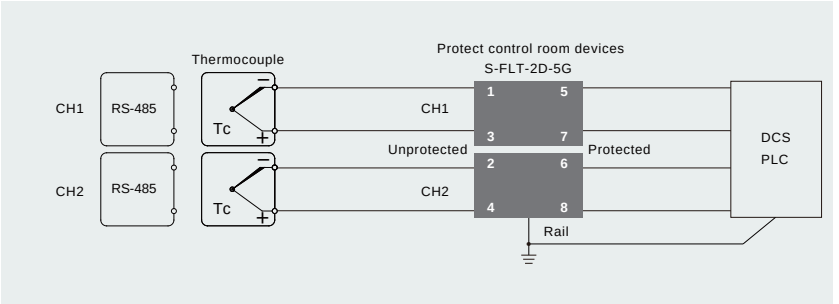
Schematic



Dimensions



Application



Features

- 2-channel system
- 24V signal system
- Max. impulse current 20 kA(8/20 μs)
- Plug in gold plating
- 12.4 mm,hot plugging
- 35 mm rail mounted

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

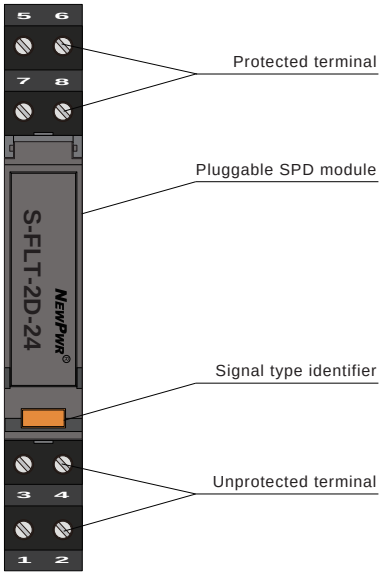
It can be applied to 2-wire pressure transmitter, valve positioner, electrical converter, flowmeter, solenoid valve and other field instruments and FF, PROFIBUS PA ect.

Parameter

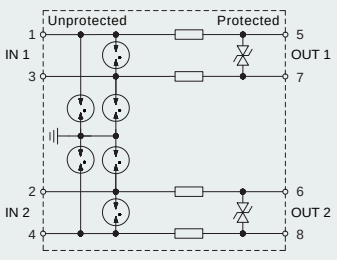
Nominal voltage Un	24 V
Max. continuous operating voltage Uc(DC)	32 V
Max. continuous operating voltage Uc(AC)	22.5 V
Nominal current I_L	850 mA
Total lightning impulse current Iimp(10/350 μs),D1	10 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤60 V/ L-PE≤550 V
Voltage protection level Up(1 kV/μs), C3	L-L≤45 V/ L-PE≤550 V
Bandwidth fG(100 Ω resistance)	10 MHz
Series impedance	1 Ω
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Grounding rail
Connecting wire size	0.2 mm^2 ~ 2.5 mm^2
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

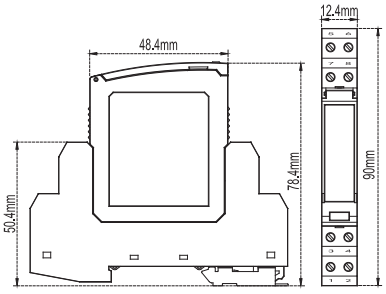
SIL3
IEC 61508



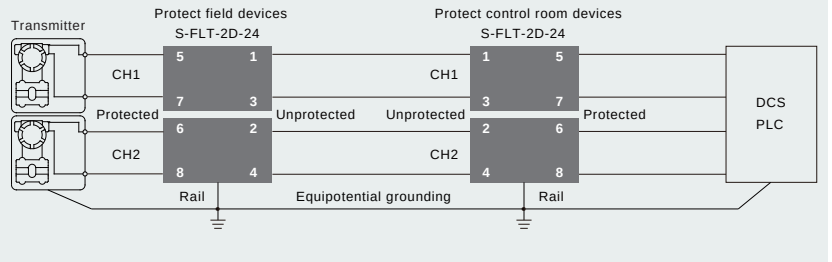
Schematic



Dimensions



Application



Features

- 2-channel system
- 24V signal system
- Max. impulse current 20 kA(8/20 μs)
- Plug in gold plating
- 12.4 mm,hot plugging
- 35 mm rail mounted

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

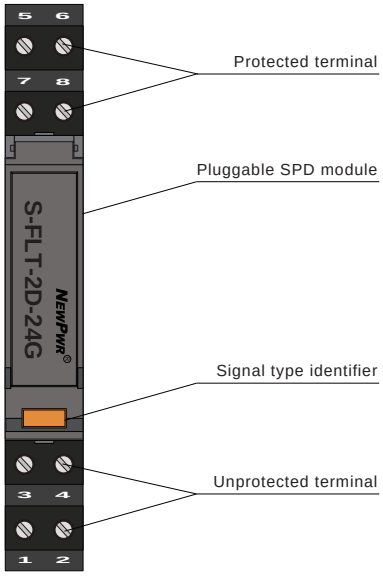
It can be applied to 2-wire pressure transmitter, valve positioner, electrical converter, flowmeter, solenoid valve and other field instruments and FF, PROFIBUS PA ect.

Parameter

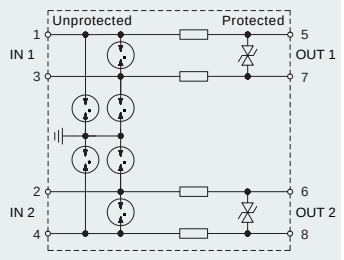
Nominal voltage Un	24 V
Max. continuous operating voltage Uc(DC)	32 V
Max. continuous operating voltage Uc(AC)	22.5 V
Nominal current I_L	850 mA
Total lightning impulse current Iimp(10/350 μs),D1	10 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤60 V/ L-PE≤60 V
Voltage protection level Up(1 kV/μs), C3	L-L≤45 V/ L-PE≤45 V
Bandwidth fG(100 Ω resistance)	10 MHz
Series impedance	1 Ω
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Grounding rail
Connecting wire size	0.2 mm^2 ~ 2.5 mm^2
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

SIL3
IEC 61508



Schematic



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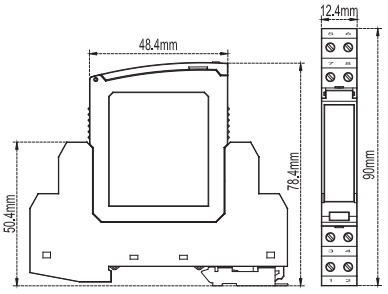
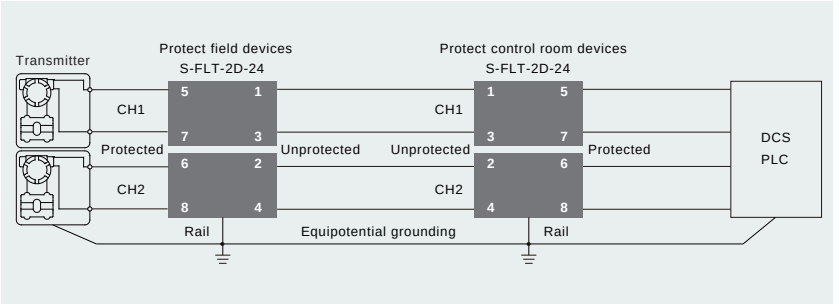


Application



Features

- 3-wire system
- 5V signal system
- Max. impulse current 20 kA(8/20 μs)
- Plug in gold plating
- 12.4 mm,hot plugging
- 35 mm rail mounted

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

It can be applied to 3 or 4 transmitter, RS-422 ect.

Parameter

Nominal voltage Un	5 V
Max. continuous operating voltage Uc(DC)	6 V
Max. continuous operating voltage Uc(AC)	4 V
Nominal current I_L	850 mA
Total lightning impulse current Iimp(10/350 μs),D1	10 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤45 V/ L-PE≤550 V
Voltage protection level Up(1 kV/μs), C3	L-L≤15 V/ L-PE≤550 V
Bandwidth fG(100 Ω resistance)	1 MHz
Series impedance	1 Ω
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Grounding rail
Connecting wire size	0.2 mm² ~ 2.5 mm²
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

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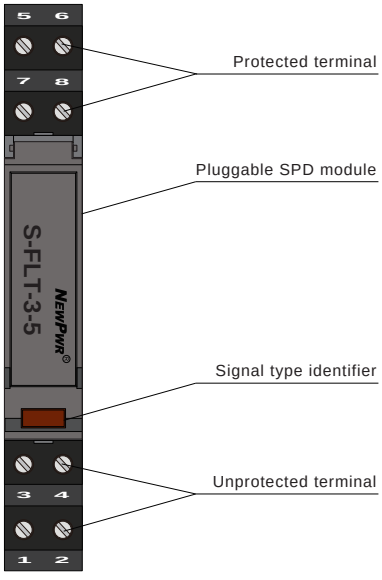
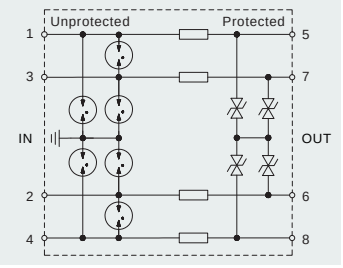
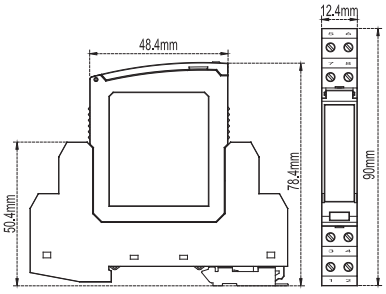
IEC 61508



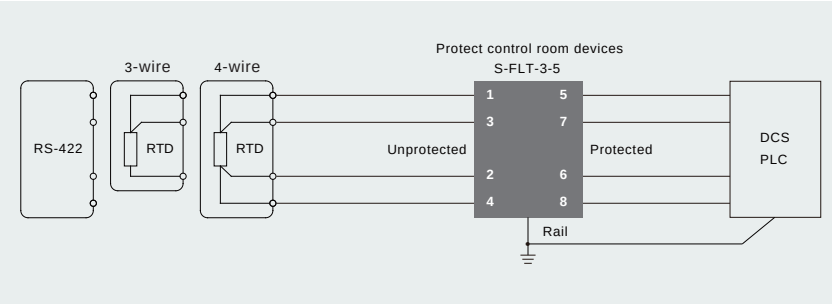
Schematic



Dimensions



Application



Features

- 3-wire system
- 5V signal system
- Max. impulse current 20 kA(8/20 μs)
- Plug in gold plating
- 12.4 mm,hot plugging
- 35 mm rail mounted

Discription

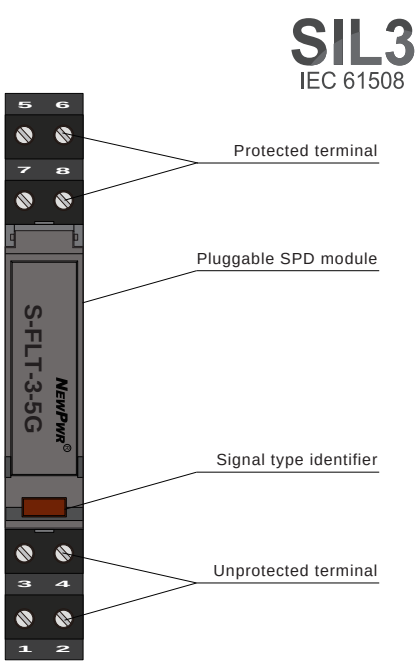
This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

It can be applied to 3 or 4 transmitter, RS-422 ect.

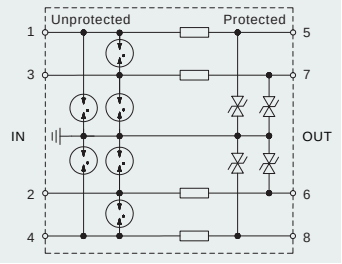
Parameter

Nominal voltage Un	5 V
Max. continuous operating voltage Uc(DC)	6 V
Max. continuous operating voltage Uc(AC)	4 V
Nominal current I_L	850 mA
Total lightning impulse current Iimp(10/350 μs),D1	10 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤45 V/ L-PE≤45 V
Voltage protection level Up(1 kV/μs), C3	L-L≤15 V/ L-PE≤15 V
Bandwidth fG(100 Ω resistance)	1 MHz
Series impedance	1 Ω
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Grounding rail
Connecting wire size	0.2 mm^2 ~ 2.5 mm^2
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

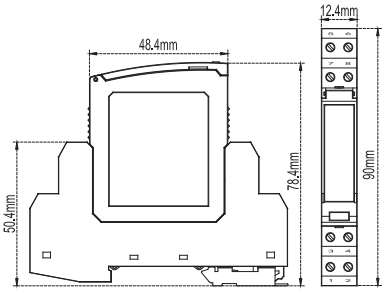
Graphics



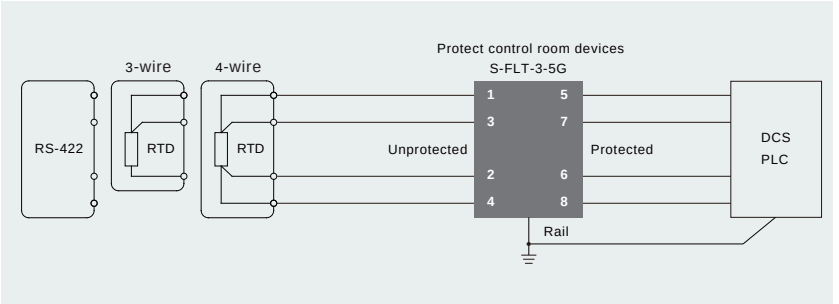
Schematic



Dimensions



Application



Features

- 3-wire system
- 24V signal system
- Max. impulse current 20 kA(8/20 μs)
- Plug in gold plating
- 12.4 mm,hot plugging
- 35 mm rail mounted

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

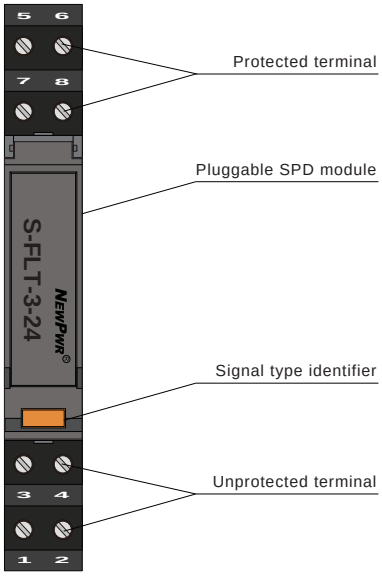
It can be applied to 3 or 4 transmitter, RS-232 ect.

Parameter

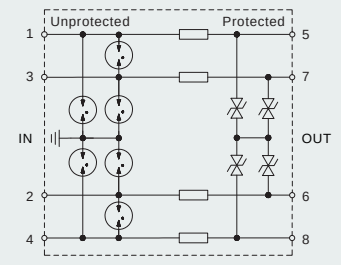
Nominal voltage Un	24 V
Max. continuous operating voltage Uc(DC)	32 V
Max. continuous operating voltage Uc(AC)	22.5 V
Nominal current I_L	850 mA
Total lightning impulse current Iimp(10/350 μs),D1	10 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤60 V/ L-PE≤550 V
Voltage protection level Up(1 kV/μs), C3	L-L≤45 V/ L-PE≤550 V
Bandwidth fG(100 Ω resistance)	7 MHz
Series impedance	1 Ω
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Grounding rail
Connecting wire size	0.2 mm² ~ 2.5 mm²
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

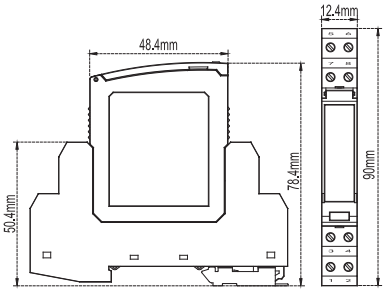
SIL3
IEC 61508



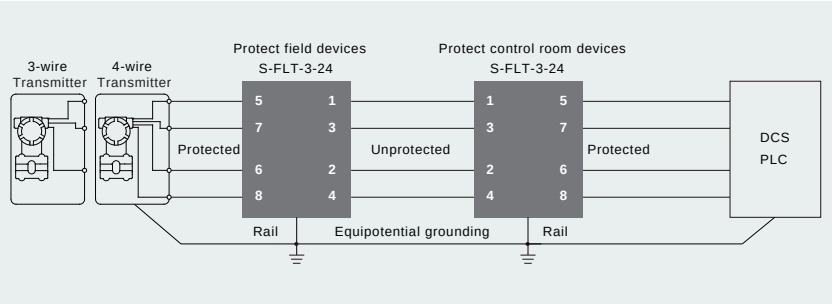
Schematic



Dimensions



Application



Features

- 3-wire system
- 24V signal system
- Max. impulse current 20 kA(8/20 μs)
- Plug in gold plating
- 12.4 mm,hot plugging
- 35 mm rail mounted

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

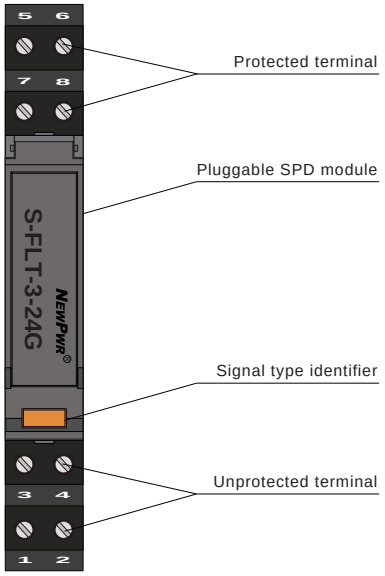
It can be applied to 3 or 4 transmitter, RS-232 ect.

Parameter

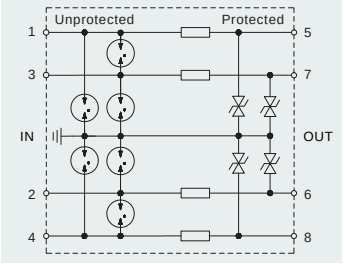
Nominal voltage Un	24 V
Max. continuous operating voltage Uc(DC)	32 V
Max. continuous operating voltage Uc(AC)	22.5 V
Nominal current I_L	850 mA
Total lightning impulse current Iimp(10/350 μs),D1	10 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤60 V/ L-PE≤60 V
Voltage protection level Up(1 kV/μs), C3	L-L≤45 V/ L-PE≤45 V
Bandwidth fG(100 Ω resistance)	7 MHz
Series impedance	1 Ω
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Grounding rail
Connecting wire size	0.2 mm^2 ~ 2.5 mm^2
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

SIL3
IEC 61508



Schematic



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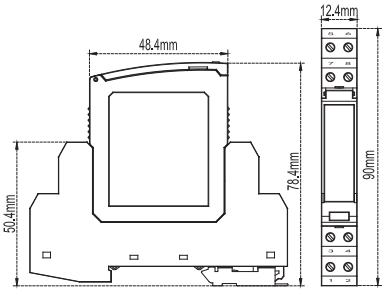
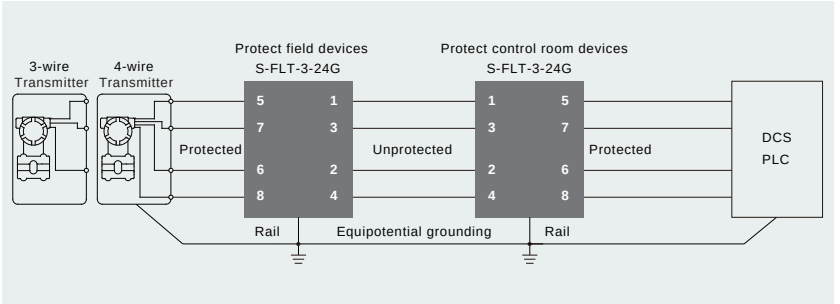


Application



Features

- 2-wire system
- 24VDC power system
- Max. impulse current 20 kA(8/20 μs)
- Plug in gold plating
- 12.4 mm,hot plugging
- 35 mm rail mounted

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

It can be applied to 24V DC power system.

Parameter

Nominal voltage Un	24 V
Max. continuous operating voltage Uc(DC)	48V
Max. continuous operating voltage Uc(AC)	34 V
Nominal current I_L	10 A
Total lightning impulse current Iimp(10/350 μs),D1	2 kA
Lightning impulse current Iimp(10/350 μs),D1	1 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤300 V/ L-PE≤800 V
Voltage protection level Up(1 kV/μs), C3	L-L≤200 V/ L-PE≤600 V
Bandwidth fG(100 Ω resistance)	10 MHz
Series impedance	<1 ns
Response time Ta	
General perameters	-40 °C ~ +80 °C
Operating temperature	35 mm DIN rail
Installtion	Grounding rail
Grounding mode	0.2 mm^2 ~ 2.5 mm^2
Connecting wire size	PC
Material	V0
Flame retardant grade(UL94)	IP20
Protection degree	IEC 61643-21/ GB/T 18802.21
Standards	

Graphics

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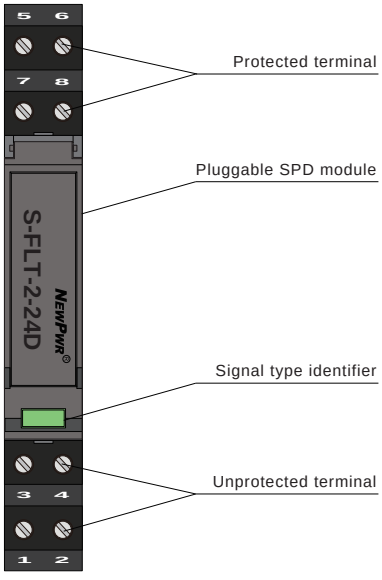
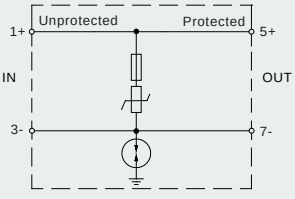
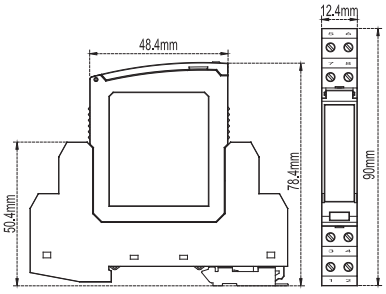


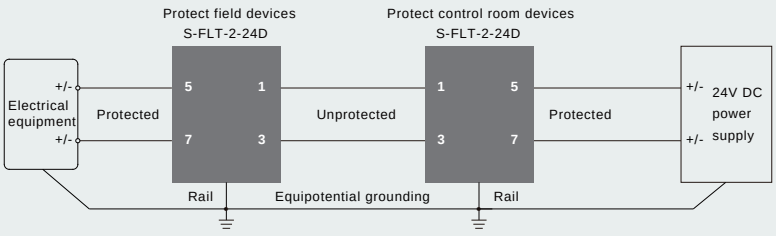
Schematic



Dimensions



Application



Ex SPD plug-in module

Describe	Model	
it is suitable for Ex S-FLT	S-FLT-2-5.Ex-V	S-FLT-2-24.Ex-V
	S-FLT-2D-5.Ex-V	S-FLT-2D-24.Ex-V
	S-FLT-2D-5G.Ex-V	S-FLT-2D-24G.Ex-V
	S-FLT-3-5.Ex-V	S-FLT-3-24.Ex-V

SPD plug-in module

Describe	Model	
it is suitable for S-FLT	S-FLT-2-5-V	S-FLT-2-24G-V
	S-FLT-2-5G-V	S-FLT-2-24D-V
	S-FLT-2D-5-V	S-FLT-2D-24-V
	S-FLT-2D-5G-V	S-FLT-2D-24G-V
	S-FLT-3-5-V	S-FLT-3-24-V
	S-FLT-3-5G-V	S-FLT-3-24G-V
	S-FLT-2-24-V	

Ex SPD base part

Describe	Model
it is suitable for Ex S-FLT	S-FLT-Ex-T

SPD base part

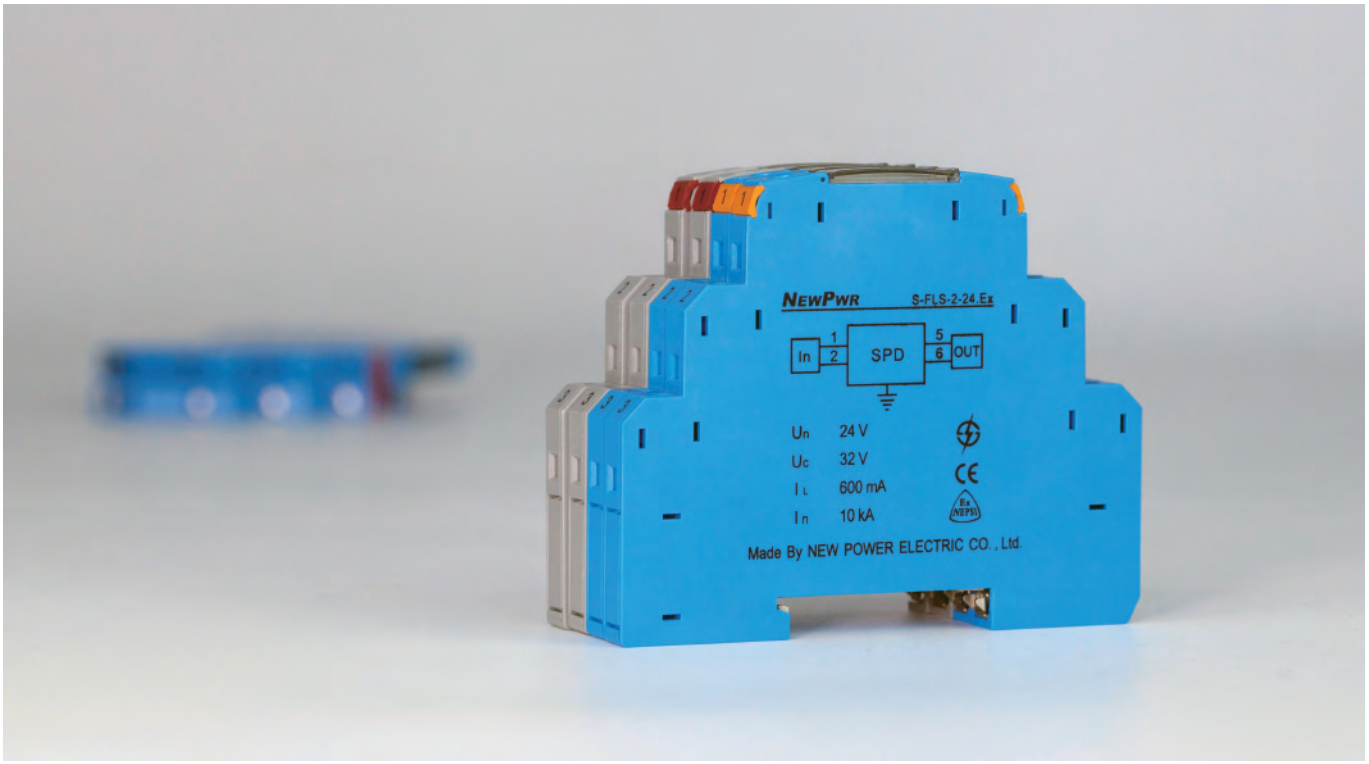
Describe	Model
it is suitable for S-FLT	S-FLT-T

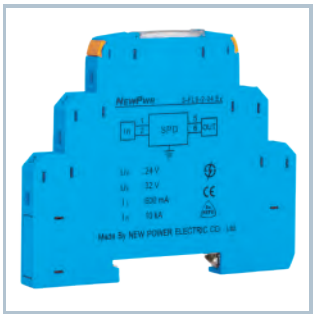
SPD Identification bar

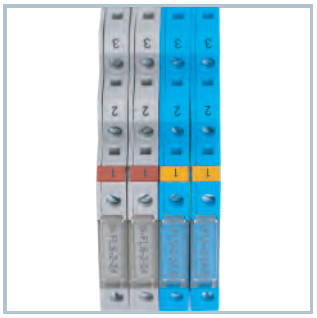
Describe	Model
5V signal system: red	S-FLT-Z (red)
24V signal system: yellow	S-FLT-C (yellow)
24V power system: green	S-FLT-L (green)

S-FLS serial Surge Protection Device

It can provide surge protection for field equipments such as sensors, transmitters, flow meters, solenoid valves, thermocouples, thermal resistance, devices with RS485 or RS232 interface and for I/O interfaces such as AI, AO, DI, DO, TI, PI in PLC, DCS, FGS, ESD control systems.
It was widely used in petrochemical, gas and new energy industries.







S-FLS Series Signal SPD---Selection Guide

Signal Type	SPD Mode	Nomimal Voltage Un	Nomimal Current I_L	Max. Discharge Current Imax (8/20μs) , C2	System	Page
0(4)~20mA、0~10V,etc. analog signal	S-FLS-2-24.Ex	24 V	600 mA	20 kA	2-wire	28
	S-FLS-3-24.Ex	24 V	600 mA	20 kA	3-wire	30
	S-FLS-2-24	24 V	600 mA	20 kA	2-wire	33
	S-FLS-2-24G	24 V	600 mA	20 kA	2-wire	34
	S-FLS-3-24	24 V	600 mA	20 kA	3-wire	37
	S-FLS-3-24G	24 V	600 mA	20 kA	3-wire	38
Thermocouple 、thermal resistance, etc.	S-FLS-2-5.Ex	5 V	600 mA	20 kA	2-wire	27
	S-FLS-3-5.Ex	5 V	600 mA	20 kA	3-wire	29
	S-FLS-2-5	5 V	600 mA	20 kA	2-wire	31
	S-FLS-2-5G	5 V	600 mA	20 kA	2-wire	32
	S-FLS-3-5	5 V	600 mA	20 kA	3-wire	35
	S-FLS-3-5G	5 V	600 mA	20 kA	3-wire	36
RS-485、MODBUS、PROFIBUS-DP、CAN, etc.	S-FLS-2-5.Ex	5 V	600 mA	20 kA	2-wire	27
	S-FLS-2-5	5 V	600 mA	20 kA	2-wire	31
	S-FLS-2-5G	5 V	600 mA	20 kA	2-wire	32
RS-232	S-FLS-3-24.Ex	24 V	600 mA	20 kA	3-wire	30
	S-FLS-3-24	24 V	600 mA	20 kA	3-wire	37
	S-FLS-3-24G	24 V	600 mA	20 kA	3-wire	38
Power supply	S-FLS-2-24D	24 V	10A	20 kA	2-wire	39

Features

- 2 line system
- Intrinsically safe 5V signal system
- Strong resistance to surge
- 7.4mm Ultra-thin design
- Support terminal grounding (optional)
- 35 mm rail installation

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

It can be applied to 2 wire RTD, TC, RS-485, MODBUS, PROFIBUSDP, CAN ect.

Parameter

Nominal voltage Un	5 V
Max. continuous operating voltage Uc(DC)	6 V
Max. continuous operating voltage Uc(AC)	4 V
Nominal current I_L	600 mA
Total lightning impulse current Iimp(10/350 μs),D1	5 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤45 V/ L-PE≤600 V
Voltage protection level Up(1 kV/μs), C3	L-L≤15 V/ L-PE≤600 V
Bandwidth fG(100 Ω resistance)	100 MHz
Series impedance	1.8 Ω
Response time Ta	<1 ns
Intrinsically safe circuit certification	Ex ia II C T6 Ga
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Rail/ terminal (optional)
Connecting wire size	0.2 mm² ~ 2.5 mm²
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

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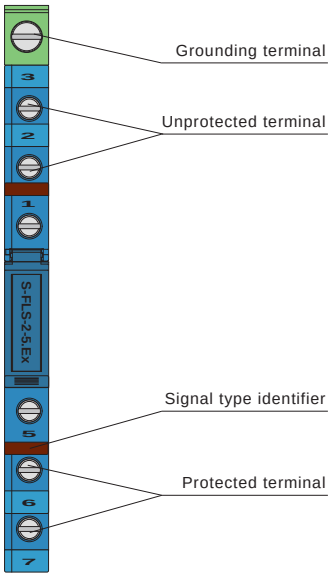
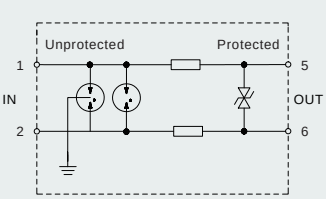
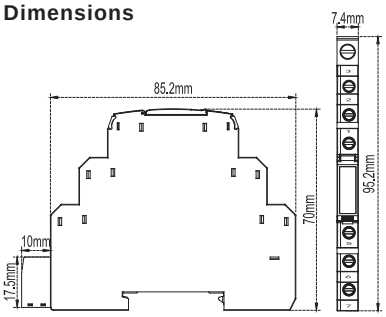


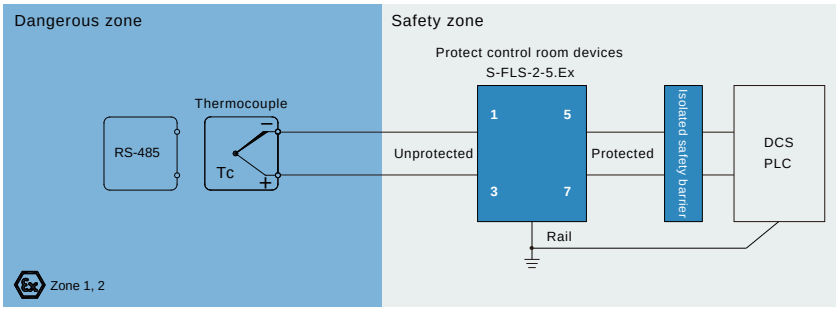
Schematic



Dimensions



Application



Features

- 2-wire system
- Intrinsically safe 24V signal system
- Strong resistance to surge
- 7.4mm Ultra-thin design
- Support terminal grounding (optional)
- 35 mm rail mounted

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

It can be applied to 2-wire pressure transmitter, valve positioner, electrical converter, flowmeter, solenoid valve and other field instruments and FF, PROFIBUS PA ect.

Parameter

Nominal voltage Un	24 V
Max. continuous operating voltage Uc(DC)	32 V
Max. continuous operating voltage Uc(AC)	22.5 V
Nominal current I_L	600 mA
Total lightning impulse current Iimp(10/350 μs),D1	5 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤60 V/ L-PE≤600 V
Voltage protection level Up(1 kV/μs), C3	L-L≤45 V/ L-PE≤600 V
Bandwidth fG(100 Ω resistance)	10 MHz
Series impedance	1.8 Ω
Response time Ta	<1 ns
Intrinsically safe circuit certification	Ex ia II C T6 Ga
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Rail/ terminal (optional)
Connecting wire size	0.2 mm^2 ~ 2.5 mm^2
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

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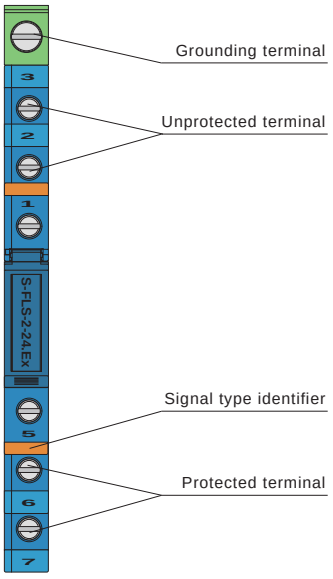
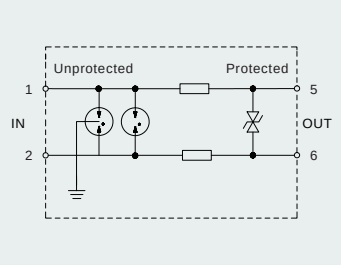


Schematic



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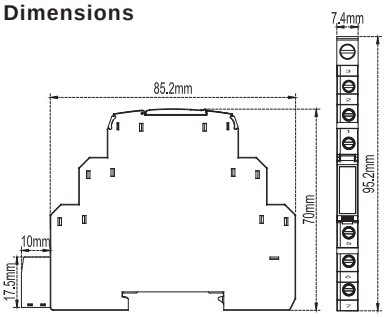
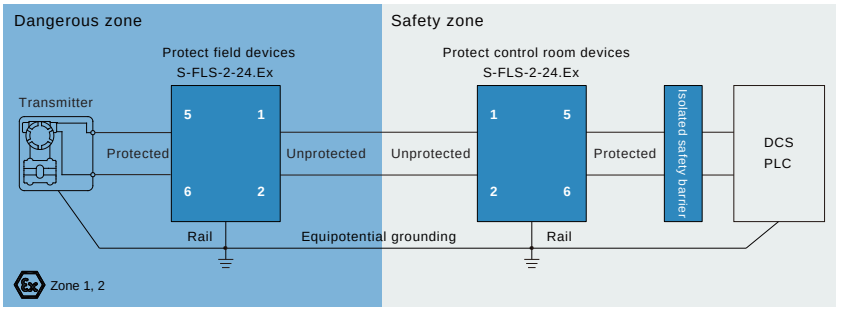


Application



Features

- 3-wire system
- Intrinsically safe 5V signal system
- Strong resistance to surge
- 7.4mm Ultra-thin design
- Support terminal grounding (optional)
- 35 mm rail mounted

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

It can be applied to 3-RTD ect.

Parameter

Nominal voltage Un	5 V
Max. continuous operating voltage Uc(DC)	6 V
Max. continuous operating voltage Uc(AC)	4 V
Nominal current I_L	600 mA
Total lightning impulse current Iimp(10/350 μs),D1	7.5 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤45 V/ L-PE≤600 V
Voltage protection level Up(1 kV/μs), C3	L-L≤15 V/ L-PE≤600 V
Bandwidth fG(100 Ω resistance)	10 MHz
Series impedance	1.8 Ω
Response time Ta	<1 ns
Intrinsically safe circuit certification	Ex ia II C T4/T5/T6 Ga
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Rail/ terminal (optional)
Connecting wire size	0.2 mm^2 ~ 2.5 mm^2
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

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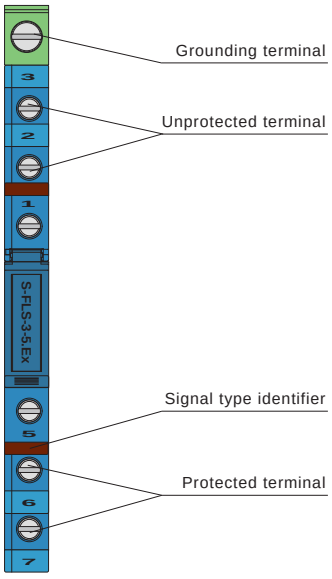
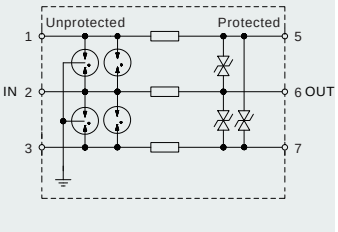
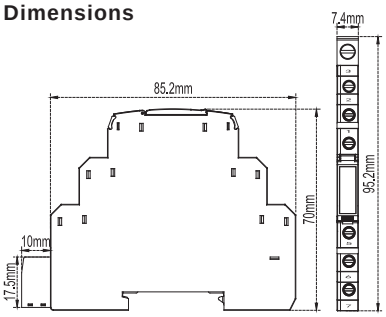


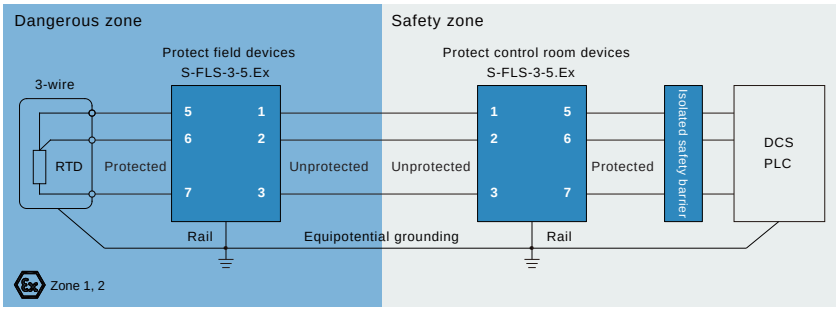
Schematic



Dimensions



Application



Features

- 3-wire system
- Intrinsically safe 24V signal system
- Strong resistance to surge
- 7.4mm Ultra-thin design
- Support terminal grounding (optional)
- 35 mm rail mounted

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

It can be applied to 3 or 4 transmitter, RS-232 ect.

Parameter

Nominal voltage Un	24 V
Max. continuous operating voltage Uc(DC)	32 V
Max. continuous operating voltage Uc(AC)	22.5 V
Nominal current I_L	600 mA
Total lightning impulse current Iimp(10/350 μs),D1	7.5 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤60 V/ L-PE≤600 V
Voltage protection level Up(1 kV/μs), C3	L-L≤45 V/ L-PE≤600 V
Bandwidth fG(100 Ω resistance)	10 MHz
Series impedance	1.8 Ω
Response time Ta	<1 ns
Intrinsically safe circuit certification	Ex ia II C T6 Ga
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Rail/ terminal (optional)
Connecting wire size	0.2 mm² ~ 2.5 mm²
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

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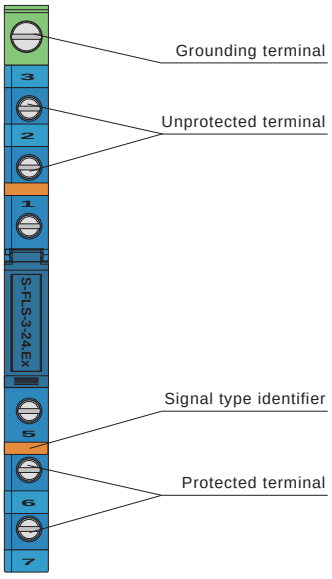
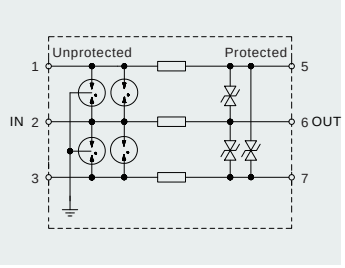
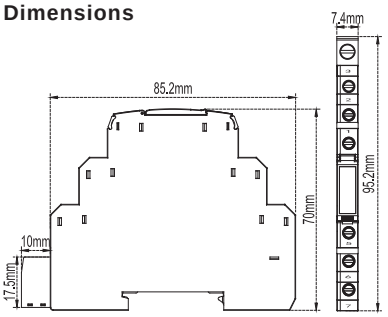
IEC 61508



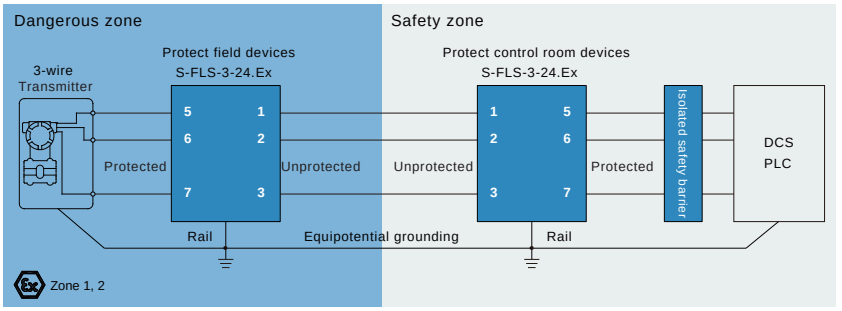
Schematic



Dimensions



Application



Features

- 2-wire system
- 5V signal system
- Strong resistance to surge
- 7.4mm Ultra-thin design
- Support terminal grounding (optional)
- 35 mm rail mounted

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

It can be applied to 2 wire RTD, TC, RS-485, MODBUS, PROFIBUSDP, CAN ect.

Parameter

Nominal voltage Un	5 V
Max. continuous operating voltage Uc(DC)	6 V
Max. continuous operating voltage Uc(AC)	4 V
Nominal current I_L	600 mA
Total lightning impulse current Iimp(10/350 μs),D1	5 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤45 V/ L-PE≤600 V
Voltage protection level Up(1 kV/μs), C3	L-L≤15 V/ L-PE≤600 V
Bandwidth fG(100 Ω resistance)	100 MHz
Series impedance	1.8 Ω
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Rail/ terminal (optional)
Connecting wire size	0.2 mm² ~ 2.5 mm²
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

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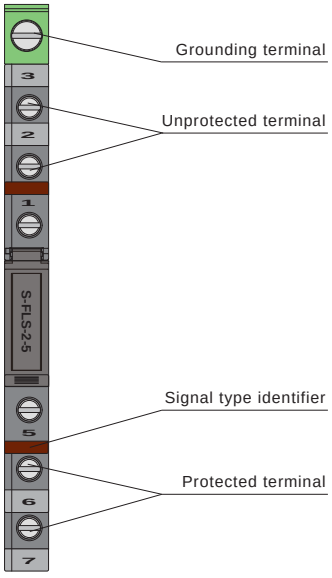
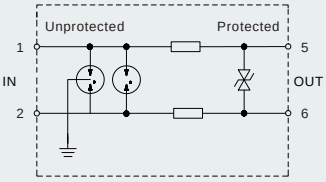
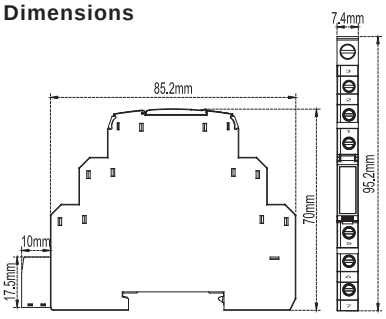
IEC 61508



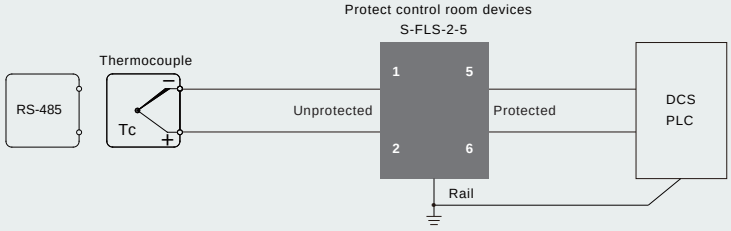
Schematic



Dimensions



Application



General SPD

Features

- 2-wire system
- 5V signal system
- Strong resistance to surge
- 7.4mm Ultra-thin design
- Support terminal grounding (optional)
- 35 mm rail mounted

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

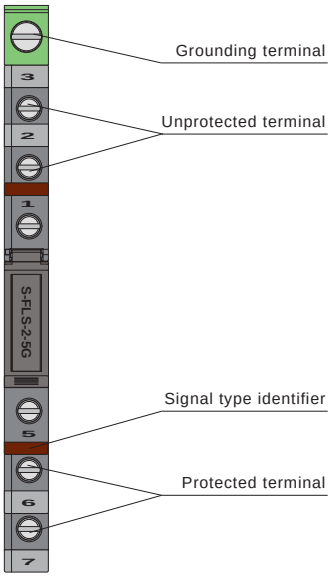
It can be applied to 2 wire RTD, TC, RS-485, MODBUS, PROFIBUSDP, CAN ect.

Parameter

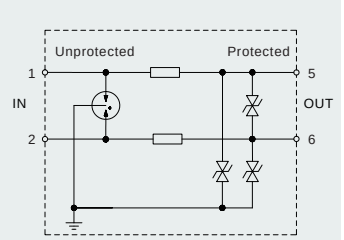
Nominal voltage Un	5 V
Max. continuous operating voltage Uc(DC)	6 V
Max. continuous operating voltage Uc(AC)	4 V
Nominal current I_L	600 mA
Total lightning impulse current Iimp(10/350 μs),D1	5 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤45 V/ L-PE≤45 V
Voltage protection level Up(1 kV/μs), C3	L-L≤15 V/ L-PE≤15 V
Bandwidth fG(100 Ω resistance)	100 MHz
Series impedance	1.8 Ω
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Rail/ terminal (optional)
Connecting wire size	0.2 mm^2 ~ 2.5 mm^2
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

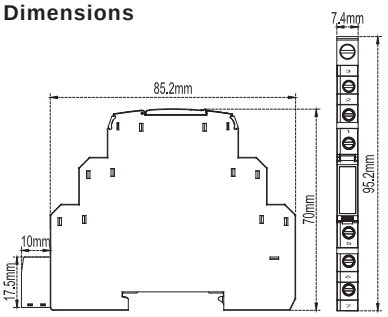
SIL3
IEC 61508



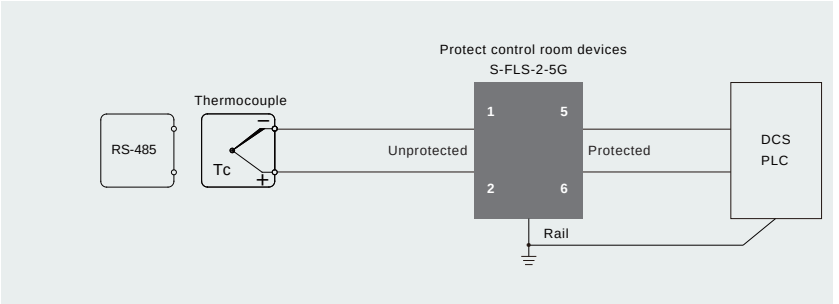
Schematic



Dimensions



Application



Features

- 2-wire system
- 24V signal system
- Strong resistance to surge
- 7.4mm Ultra-thin design
- Support terminal grounding (optional)
- 35 mm rail mounted

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

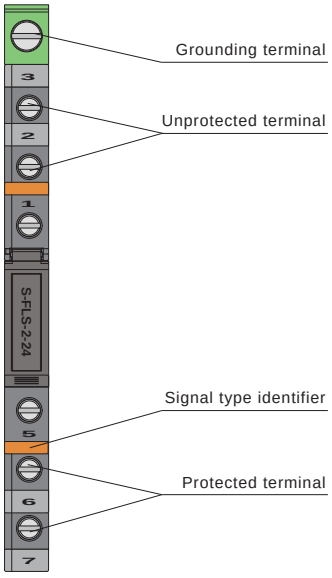
It can be applied to 2-wire pressure transmitter, valve positioner, electrical converter, flowmeter, solenoid valve and other field instruments and FF, PROFIBUS PA ect.

Parameter

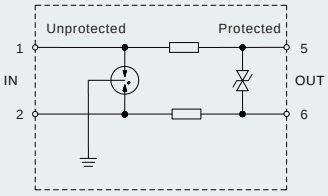
Nominal voltage Un	24 V
Max. continuous operating voltage Uc(DC)	32 V
Max. continuous operating voltage Uc(AC)	22.5 V
Nominal current I_L	600 mA
Total lightning impulse current Iimp(10/350 μs),D1	5 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤60 V/ L-PE≤600 V
Voltage protection level Up(1 kV/μs), C3	L-L≤45 V/ L-PE≤600 V
Bandwidth fG(100 Ω resistance)	10 MHz
Series impedance	1.8 Ω
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Rail/ terminal (optional)
Connecting wire size	0.2 mm^2 ~ 2.5 mm^2
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

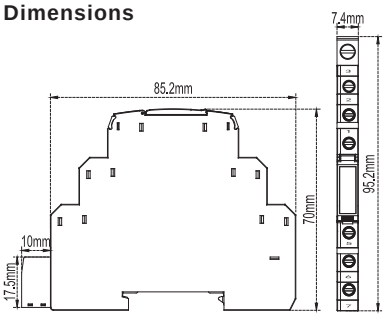
SIL3
IEC 61508



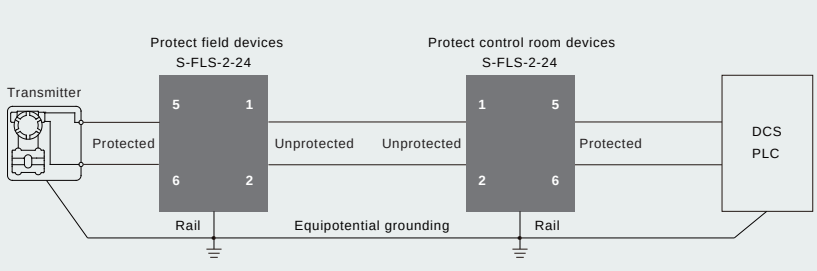
Schematic



Dimensions



Application



Features

- 2-wire system
- 24V signal system
- Strong resistance to surge
- 7.4mm Ultra-thin design
- Support terminal grounding (optional)
- 35 mm rail mounted

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

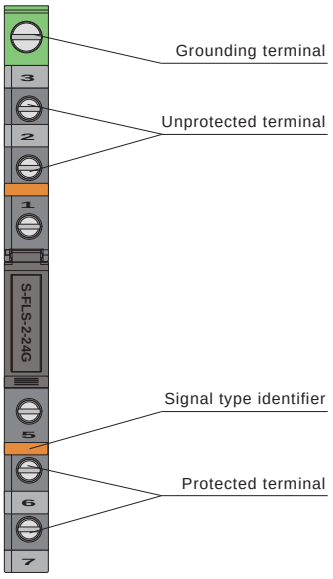
It can be applied to 2-wire pressure transmitter, valve positioner, electrical converter, flowmeter, solenoid valve and other field instruments and FF, PROFIBUS PA ect.

Parameter

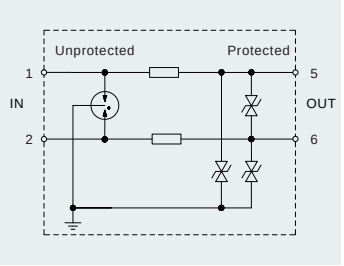
Nominal voltage Un	24V
Max. continuous operating voltage Uc(DC)	32 V
Max. continuous operating voltage Uc(AC)	22.5 V
Nominal current I_L	600 mA
Total lightning impulse current Iimp(10/350 μs),D1	5 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤60 V/ L-PE≤60 V
Voltage protection level Up(1 kV/μs), C3	L-L≤45 V/ L-PE≤45 V
Bandwidth fG(100 Ω resistance)	10 MHz
Series impedance	1.8 Ω
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Rail/ terminal (optional)
Connecting wire size	0.2 mm^2 ~ 2.5 mm^2
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

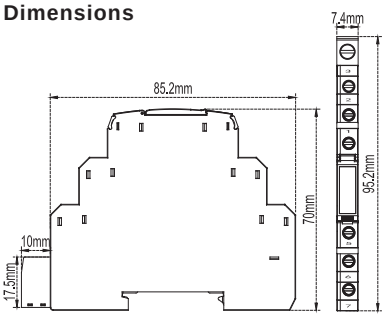
SIL3
IEC 61508



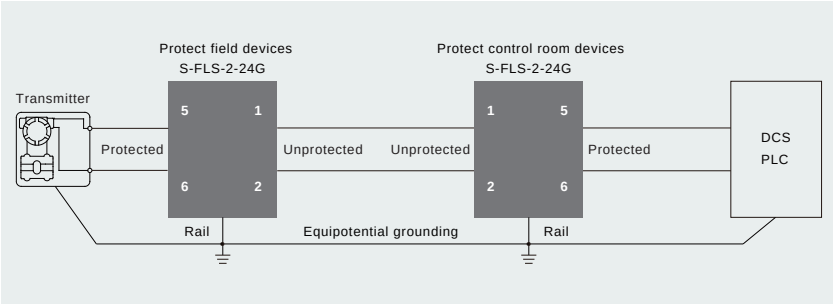
Schematic



Dimensions



Application



Features

- 3-wire system
- 5V signal system
- Strong resistance to surge
- 7.4mm Ultra-thin design
- Support terminal grounding (optional)
- 35 mm rail mounted

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

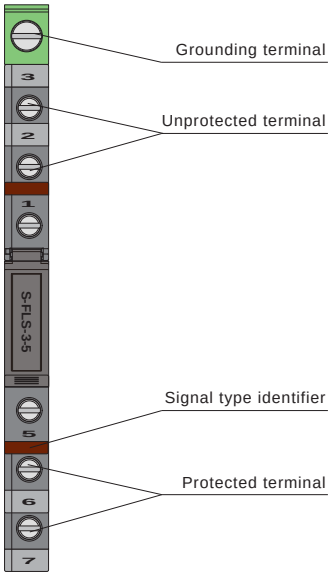
It can be applied to 3-wire RTD ect.

Parameter

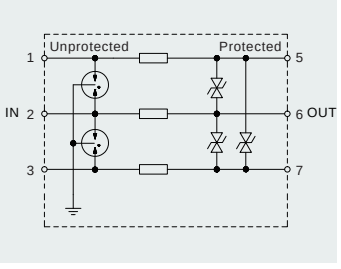
Nominal voltage Un	5 V
Max. continuous operating voltage Uc(DC)	6 V
Max. continuous operating voltage Uc(AC)	4 V
Nominal current I_L	600 mA
Total lightning impulse current Iimp(10/350 μs),D1	7.5 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤45 V/ L-PE≤600 V
Voltage protection level Up(1 kV/μs), C3	L-L≤15 V/ L-PE≤600 V
Bandwidth fG(100 Ω resistance)	10 MHz
Series impedance	1.8 Ω
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Rail/ terminal (optional)
Connecting wire size	0.2 mm² ~ 2.5 mm²
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

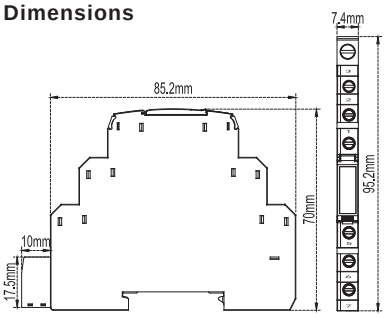
SIL3
IEC 61508



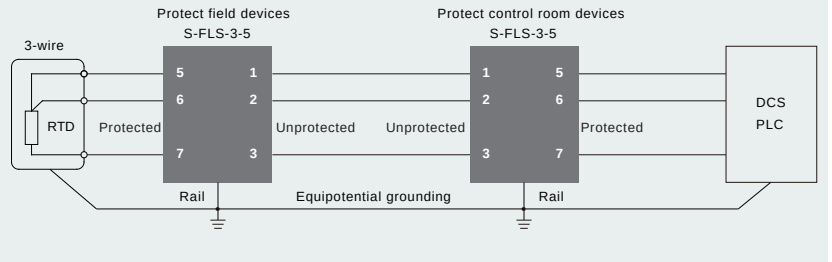
Schematic



Dimensions



Application



General SPD

Features

- 3-wire system
- 5V signal system
- Strong resistance to surge
- 7.4mm Ultra-thin design
- Support terminal grounding (optional)
- 35 mm rail mounted

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

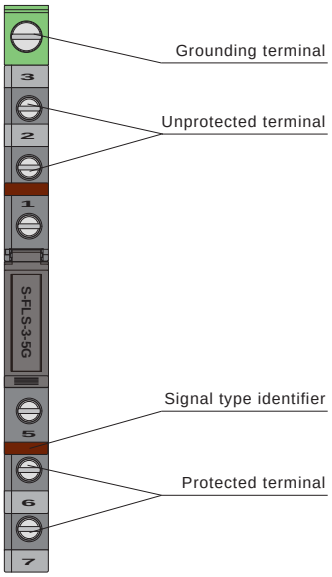
It can be applied to 3-RTD ect.

Parameter

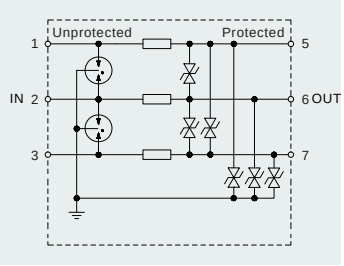
Nominal voltage Un	5 V
Max. continuous operating voltage Uc(DC)	6 V
Max. continuous operating voltage Uc(AC)	4 V
Nominal current I_L	600 mA
Total lightning impulse current Iimp(10/350 μs),D1	7.5 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤45 V/ L-PE≤45 V
Voltage protection level Up(1 kV/μs), C3	L-L≤15 V/ L-PE≤15 V
Bandwidth fG(100 Ω resistance)	10 MHz
Series impedance	1.8 Ω
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Rail/ terminal (optional)
Connecting wire size	0.2 mm^2 ~ 2.5 mm^2
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

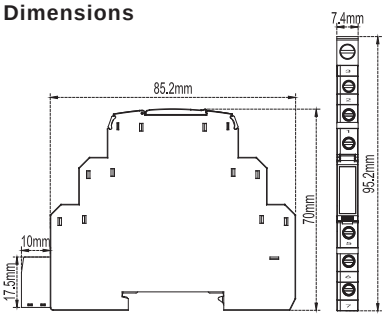
SIL3
IEC 61508



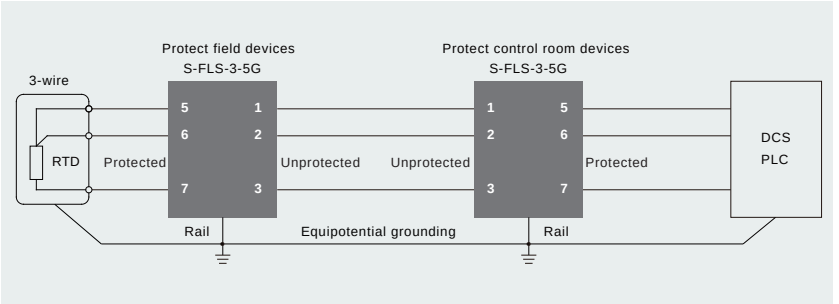
Schematic



Dimensions



Application



Features

- 3-wire system
- 24V signal system
- Strong resistance to surge
- 7.4mm Ultra-thin design
- Support terminal grounding (optional)
- 35 mm rail mounted

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

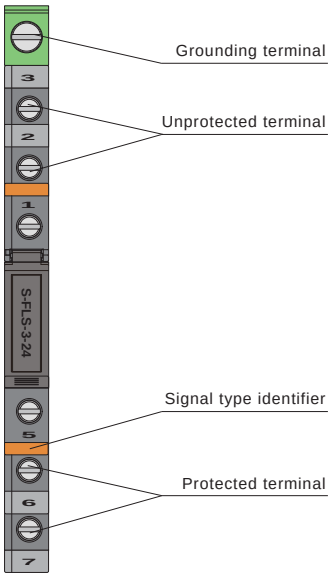
It can be applied to 3-wire transmitter, RS-232 ect.

Parameter

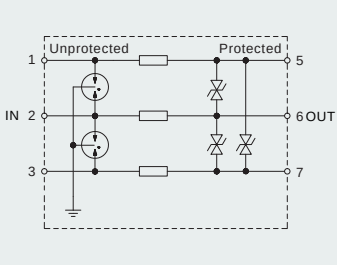
Nominal voltage Un	24 V
Max. continuous operating voltage Uc(DC)	32 V
Max. continuous operating voltage Uc(AC)	22.5 V
Nominal current I_L	600 mA
Total lightning impulse current Iimp(10/350 μs),D1	7.5 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤60 V/ L-PE≤600 V
Voltage protection level Up(1 kV/μs), C3	L-L≤45 V/ L-PE≤600 V
Bandwidth fG(100 Ω resistance)	10 MHz
Series impedance	1.8 Ω
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Rail/ terminal (optional)
Connecting wire size	0.2 mm² ~ 2.5 mm²
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

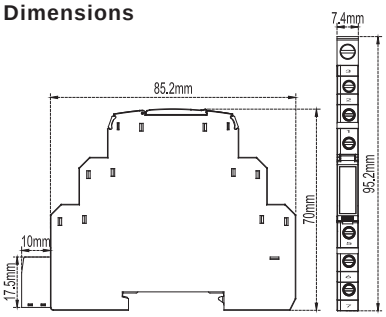
SIL3
IEC 61508



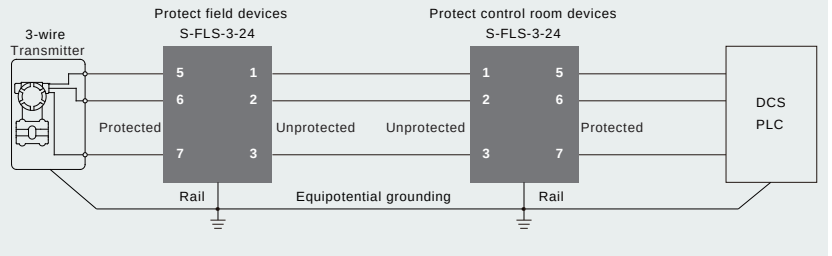
Schematic



Dimensions



Application



Features

- 3-wire system
- 24V signal system
- Strong resistance to surge
- 7.4mm Ultra-thin design
- Support terminal grounding (optional)
- 35 mm rail mounted

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

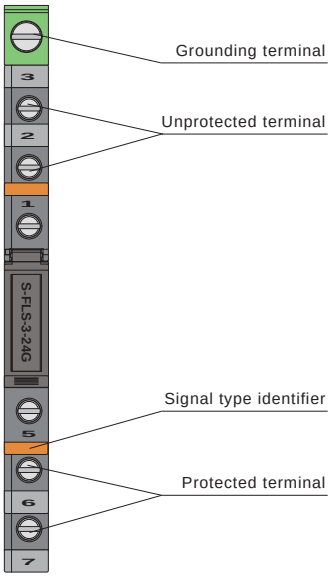
It can be applied to 3-wire transmitter, RS-232 ect.

Parameter

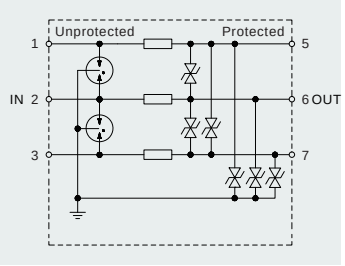
Nominal voltage Un	24V
Max. continuous operating voltage Uc(DC)	32V
Max. continuous operating voltage Uc(AC)	22.5 V
Nominal current I_L	600 mA
Total lightning impulse current Iimp(10/350 μs),D1	7.5 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤60 V/ L-PE≤60 V
Voltage protection level Up(1 kV/μs), C3	L-L≤45 V/ L-PE≤45 V
Bandwidth fG(100 Ω resistance)	10 MHz
Series impedance	1.8 Ω
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Rail/ terminal (optional)
Connecting wire size	0.2 mm^2 ~ 2.5 mm^2
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

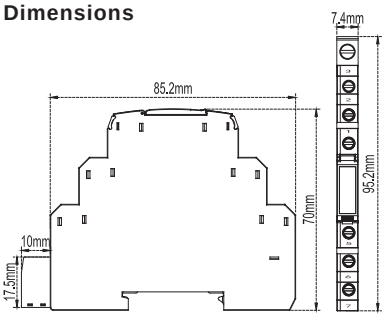
SIL3
IEC 61508



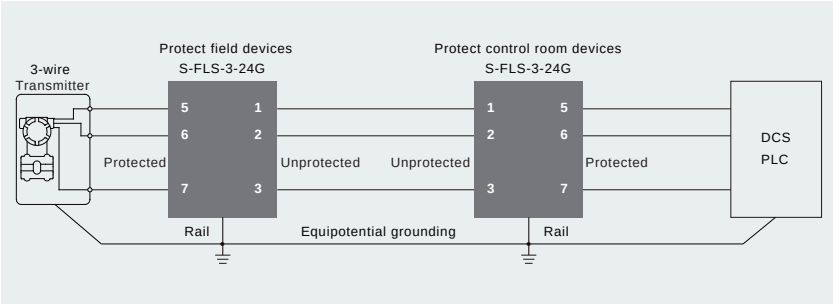
Schematic



Dimensions



Application



Features

- 2-wire system
- 24VDC power system
- Strong resistance to surge
- 7.4mm Ultra-thin design
- Support terminal grounding (optional)
- 35 mm rail mounted

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

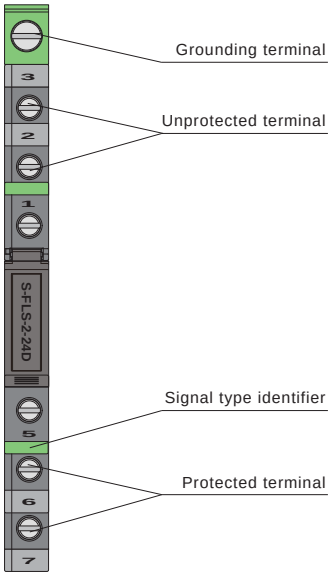
It can be applied to 24V DC power system.

Parameter

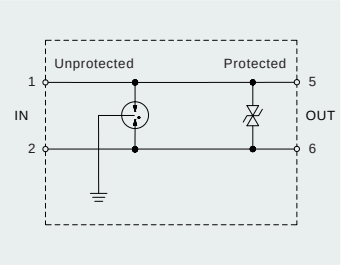
Nominal voltage Un	24 V
Max. continuous operating voltage Uc(DC)	36 V
Max. continuous operating voltage Uc(AC)	25.5 V
Nominal current I_L	10 A
Total lightning impulse current Iimp(10/350 μs),D1	5 kA
Lightning impulse current Iimp(10/350 μs),D1	2.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs), C2	L-L≤60 V/ L-PE≤600 V
Voltage protection level Up(1 kV/μs), C3	L-L≤45 V/ L-PE≤600 V
Bandwidth fG(100 Ω resistance)	10 MHz
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN rail
Grounding mode	Rail/ terminal (optional)
Connecting wire size	0.2 mm^2 ~ 2.5 mm^2
Material	PC
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

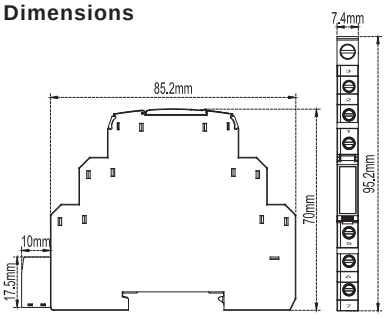
SIL3
IEC 61508



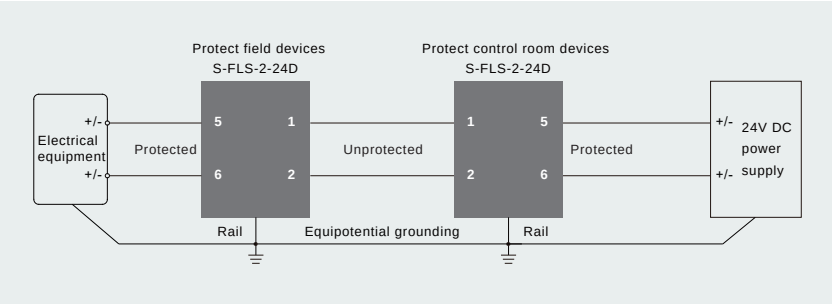
Schematic



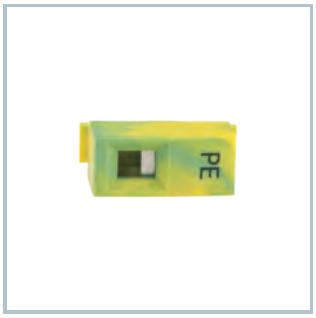
Dimensions



Application

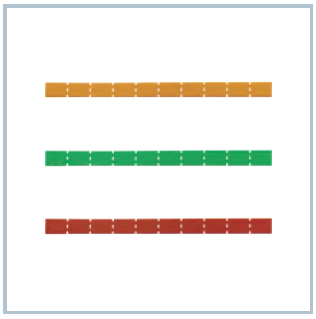


General SPD



SPD Grounding terminal

Describe	Model
it is suitable for S-FLS	S-FLS-D



SPD Identification bar

Describe	Model
5V signal system: red	S-FLS-Z (red)
24V signal system: yellow	S-FLS-C (yellow)
24V power system: green	S-FLS-L (green)

S-FLP serial Surge Protection Device

It can provide surge protection for field equipments such as sensors, transmitters, flow meters, solenoid valves, thermocouples, thermal resistance, devices with RS485 or RS232 interface.

It was widely used in petrochemical, gas, environmental protection and new energy industries.

S-FLP Series Signal SPD---Selection Guide

Signal Type	SPD Mode	Nomimal Voltage Un	Nomimal Current I_L	Max. Discharge Current Imax (8/20μs) , C2	System	Page
2/3/4-wire transmitter, thermocouple,RS-485, RS-232,RS-422, solenoid valve, flowmeter,etc.	S-FLP-2P-24.Ex	24 V	-	20 kA	2-wire	43
	S-FLP-3P-24.Ex	24 V	-	20 kA	3-wire	44
	S-FLP-4P-24.Ex	24 V	-	20 kA	4-wire	45
	S-FLP-2S-24.Ex	24 V	600 mA	20 kA	2-wire	46
	S-FLP-3S-24.Ex	24 V	600 mA	20 kA	3-wire	47

Features

- 2-wire system
- M20×1.5 male thread(optional)
- Strong resistance to surge
- For parallel connection
- 304 stainless steel shell
- 24V signal system

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

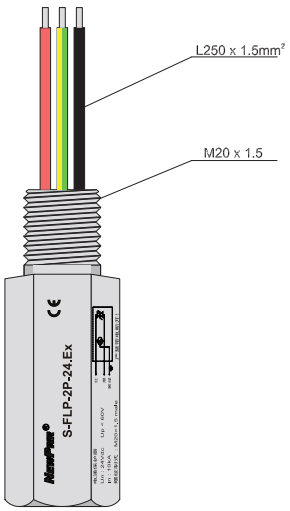
It can be applied to 2-wire pressure transmitter, valve positioner, electrical converter, flowmeter, solenoid valve and RS485 ect.

Parameter

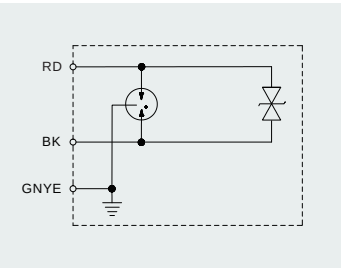
Nominal voltage Un	24 V
Max. continuous operating voltage Uc(DC)	32 V
Max. continuous operating voltage Uc(AC)	22.5 V
Total lightning impulse current Iimp(10/350 μs),D1	2 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs)，C2	L-L≤60 V/ L-PE≤600 V
Bandwidth fG(100 Ω resistance)	10 MHz
Response time ta	<1 ns
Intrinsically safe circuit certification	Ex db IIC Gb Ex ia IIC T6 Ga
Gerenal perameters	
Operating temperature	-40 °C ~ +80 °C
For mounting on (field / device side)	M20×1.5、1/2" 14NPT、 G 1/2"ect（male thread）
Grounding on	Yellow-green line
Installtion	Parallel connection
Length of the connecting lead	connection:1.5 mm^2 length:250 mm
Material	304/316 Stainless steel
Flame retardant grade(UL94)	V0
Protection degree	IP67
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

SIL3
IEC 61508



Schematic



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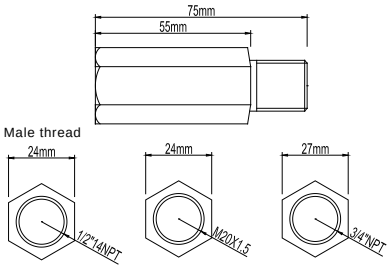
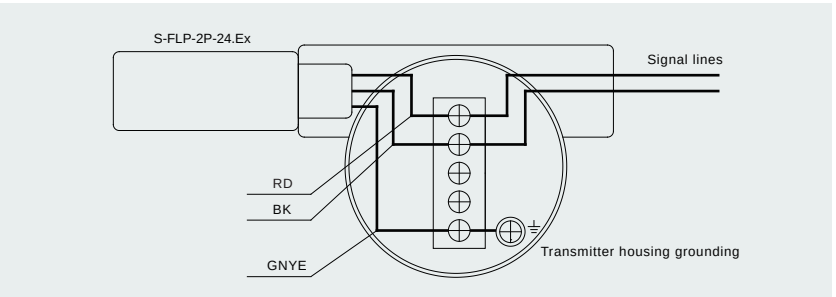


Application



Features

- 3-wire system
- M20×1.5 male thread(optional)
- Strong resistance to surge
- For parallel connection
- 304 stainless steel shell
- 24V signal system

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

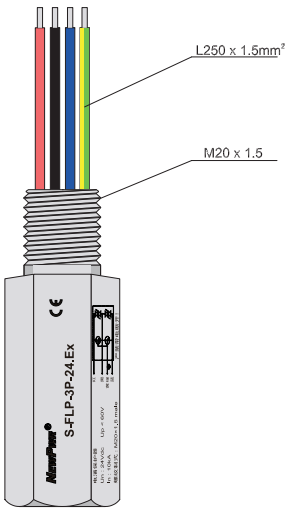
It can be applied to 3-wire transmitter, RS232 and RTD ect.

Parameter

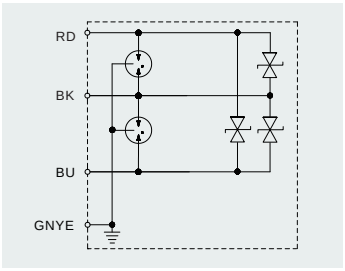
Nominal voltage Un	24 V
Max. continuous operating voltage Uc(DC)	32 V
Max. continuous operating voltage Uc(AC)	22.5 V
Total lightning impulse current Iimp(10/350 μs),D1	2 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs)，C2	L-L≤60 V/ L-PE≤600 V
Bandwidth fG(100 Ω resistance)	10 MHz
Response time ta	<1 ns
Intrinsically safe circuit certification	Ex db IIC Gb Ex ia IIC T6 Ga
Gerenal perameters	
Operating temperature	-40 °C ~ +80 °C
For mounting on (field / device side)	M20×1.5、1/2" 14NPT、 G 1/2"ect（male thread）
Grounding on	Yellow-green line
Installtion	Parallel connection
Length of the connecting lead	connection:1.5 mm² length:250 mm
Material	304/316 Stainless steel
Flame retardant grade(UL94)	V0
Protection degree	IP67
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

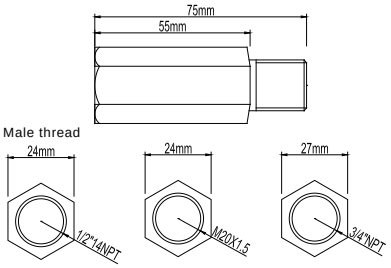
SIL3
IEC 61508



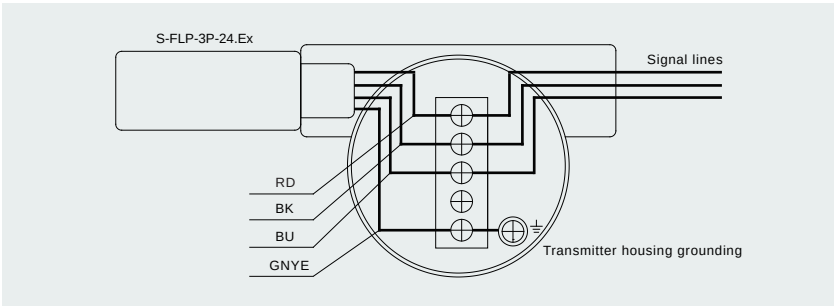
Schematic



Dimensions



Application



Features

- 4-wire system
- M20×1.5 male thread(optional)
- Strong resistance to surge
- For parallel connection
- 304 stainless steel shell
- 24V signal system

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

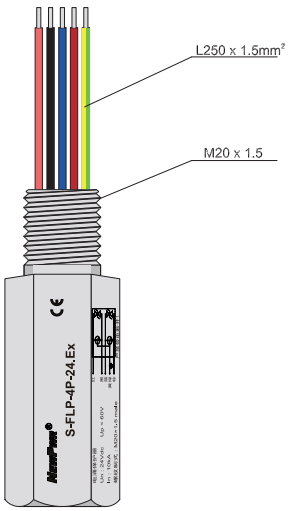
It can be applied to 4-wire transmitter, and RS422 ect.

Parameter

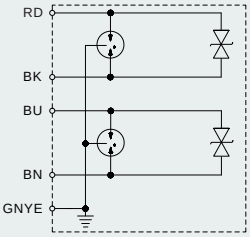
Nominal voltage Un	24 V
Max. continuous operating voltage Uc(DC)	32 V
Max. continuous operating voltage Uc(AC)	22.5 V
Total lightning impulse current Iimp(10/350 μs),D1	2 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs)，C2	L-L≤60 V/ L-PE≤600 V
Bandwidth fG(100 Ω resistance)	10 MHz
Response time ta	<1 ns
Intrinsically safe circuit certification	Ex db IIC Gb Ex ia IIC T6 Ga
Gerenal perameters	
Operating temperature	-40 °C ~ +80 °C
For mounting on (field / device side)	M20×1.5、1/2" 14NPT、 G 1/2"ect（male thread）
Grounding on	Yellow-green line
Installtion	Parallel connection
Length of the connecting lead	connection:1.5 mm² length:250 mm
Material	304/316 Stainless steel
Flame retardant grade(UL94)	V0
Protection degree	IP67
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

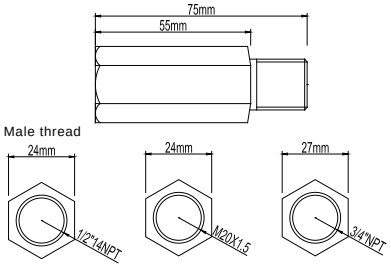
SIL3
IEC 61508



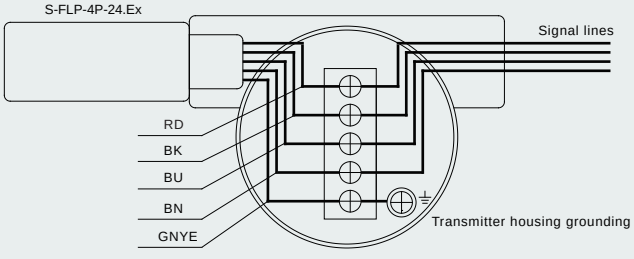
Schematic



Dimensions



Application



Features

- 2-wire system
- M20×1.5 female/male thread(optional)
- Strong resistance to surge
- For series connection
- 304 stainless steel shell
- 24V signal system

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

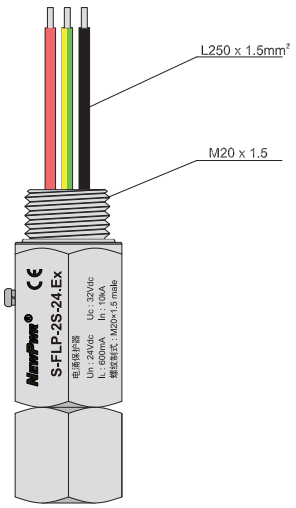
It can be applied to 2-wire pressure transmitter, valve positioner, electrical converter, flowmeter, solenoid valve and RS485 ect.

Parameter

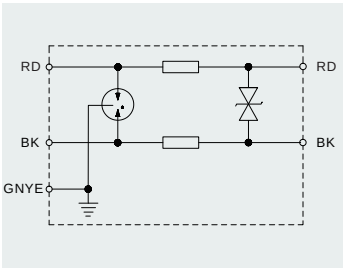
Nominal voltage Un	24 V
Max. continuous operating voltage Uc(DC)	32 V
Max. continuous operating voltage Uc(AC)	22.5 V
Nominal current IL	600 mA
Total lightning impulse current Iimp(10/350 μs),D1	2 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs)， C2	L-L≤60 V/ L-PE≤600 V
Bandwidth fG(100 Ω resistance)	10 MHz
Series impedance	2.2 Ω
Response time Ta	<1 ns
Intrinsically safe circuit certification	Ex ia IIC T6 Ga
Gerenal perameters	
Operating temperature	-40 °C ~ +80 °C
For mounting on (field / device side)	M20×1.5、1/2" 14NPT、G 1/2"ect（male thread）
Grounding on	Yellow-green line
Installtion	Series connection
Length of the connecting lead	connection:1.5 mm² length:250 mm
Material	304/316 Stainless steel
Flame retardant grade(UL94)	V0
Protection degree	IP67
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

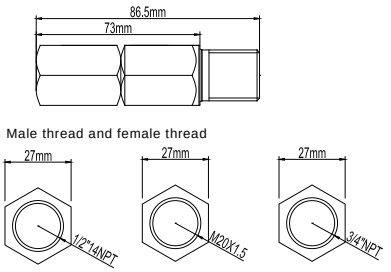
SIL3
IEC 61508



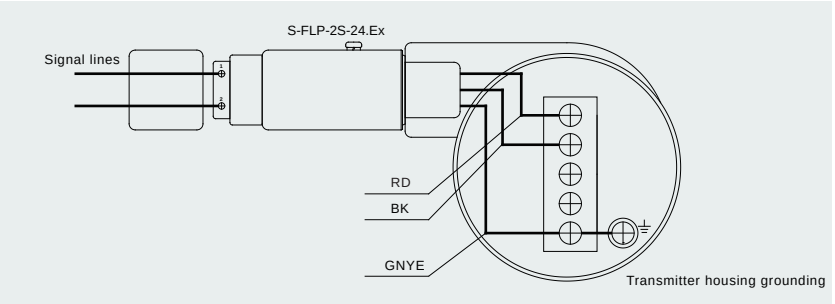
Schematic



Dimensions



Application



Features

- 3-wire system
- M20×1.5 female/male thread(optional)
- Strong resistance to surge
- For series connection
- 304 stainless steel shell
- 24V signal system

Discription

This SPD limits induced transients of different origin (lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

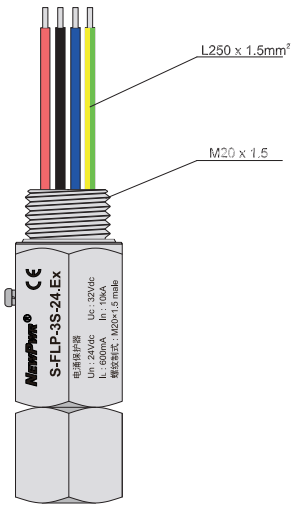
It can be applied to 3-wire transmitter, RS232 ect.

Parameter

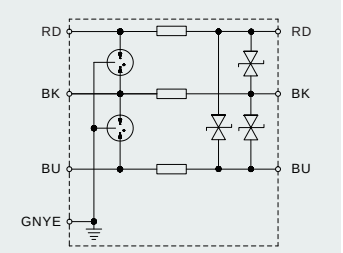
Nominal voltage Un	24 V
Max. continuous operating voltage Uc(DC)	32 V
Max. continuous operating voltage Uc(AC)	22.5 V
Nominal current IL	600 mA
Total lightning impulse current Iimp(10/350 μs),D1	2 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	10 kA
Voltage protection level Up(8/20 μs)， C2	L-L≤60 V/ L-PE≤600 V
Bandwidth fG(100 Ω resistance)	10 MHz
Series impedance	2.2 Ω
Response time Ta	<1 ns
Intrinsically safe circuit certification	Ex ia IIC T6 Ga
Gerenal perameters	
Operating temperature	-40 °C ~ +80 °C
For mounting on (field / device side)	M20×1.5、1/2" 14NPT、G 1/2"ect（male thread）
Grounding on	Yellow-green line
Installtion	Series connection
Length of the connecting lead	connection:1.5 mm² length:250 mm
Material	304/316 Stainless steel
Flame retardant grade(UL94)	V0
Protection degree	IP67
Standards	IEC 61643-21/ GB/T 18802.21

Graphics

SIL3
IEC 61508



Schematic



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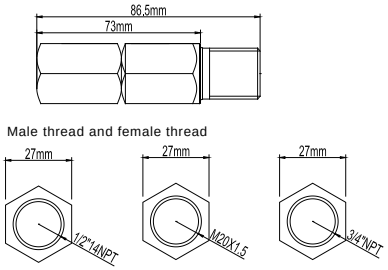
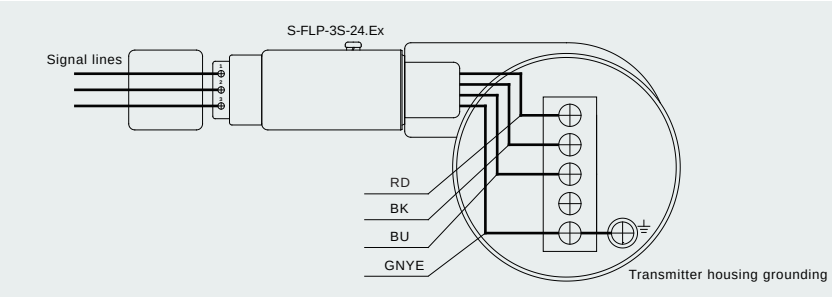


Application



Series connection SPD cable gran

Describe	Model
it is suitable for S-FLP-2S-24.Ex and S-FLP-3S-24.Ex	S-FLP-G

P serial SPD -power system

Lightning Protection---Power System
Capable of protecting terminal equipment ;
High discharge capacity , no follow current;
Widely used in petroleum, chemical, building, transportation, new energy and other industries.

P serial SPD---Guide

Power system	SPD Mode	Nomimal Voltage Un	Protect level	Test wave	Discharge current Imax	Protect voltage Up	Page
DC system	P-FL-24/20.D	24 Vdc	T3	8/20μs	20 kA	500 V	51
DC system	P-FL-48/20.D	48 Vdc	T3	8/20μs	20 kA	500 V	52
PV system	P-FL-1200/40.PV	1200 Vdc	T2	8/20μs	40 kA	4.0 kV	53
Single-phase (TT)	P-FL-385/40×P+N	230/400 Vac	T2	8/20μs	40 kA	1.8 kV	54
Single-phase (TN-S)	P-FL-385/40×2P	230/400 Vac	T2	8/20μs	40 kA	1.8 kV	55
Three-phase (IT) Three-phase (TN-C)	P-FL-385/40×3P	230/400 Vac	T2	8/20μs	40 kA	1.8 kV	56
Three-phase (TT) Three-phase (TN-S)	P-FL-385/40×3P+N	230/400 Vac	T2	8/20μs	40 kA	1.8 kV	57
Single-phase (TT)	P-FL-385/60×P+N	230/400 Vac	T2	8/20μs	60 kA	2.0 kV	58
Single-phase (TN-S)	P-FL-385/60×2P	230/400 Vac	T2	8/20μs	60 kA	2.0 kV	59
Three-phase (IT) Three-phase (TN-C)	P-FL-385/60×3P	230/400 Vac	T2	8/20μs	60 kA	2.0 kV	60
Three-phase (TT) Three-phase (TN-S)	P-FL-385/60×3P+N	230/400 Vac	T2	8/20μs	60 kA	2.0 kV	61
Single-phase (TT)	P-FL-385/80×P+N	240/415 Vac	T2	8/20μs	80 kA	1.8 kV	62
Single-phase (TN-S)	P-FL-385/80×2P	240/415 Vac	T2	8/20μs	80 kA	1.8 kV	63
Three-phase (IT) Three-phase (TN-C)	P-FL-385/80×3P	240/415 Vac	T2	8/20μs	80 kA	1.8 kV	64
Three-phase (TT) Three-phase (TN-S)	P-FL-385/80×3P+N	240/415 Vac	T2	8/20μs	80 kA	1.8 kV	65
Three-phase (TT) Three-phase (TN-S)	P-FL-320/25×3P+N	240/415 Vac	T1	10/350μs	25 kA	1.5 kV	66
Single-phase (TT、TN)	P-FL-440/25×P	240/415 Vac	T1	10/350μs	25 kA	2.4 kV	67
Single-phase (TT、TN)	P-FL-760/25×P	400/690 Vac	T1	10/350μs	25 kA	3.5 kV	68

DC Systems（20kA，T3） P-FL-24/20.D

Features

- A base part and a plug-in protection module
- Patented large arc extinguisher technology
- Module unlock button, anti-vibration
- Status indicator, remote alarm
- 24VDC Power System
- 35 mm rail installation

Discription

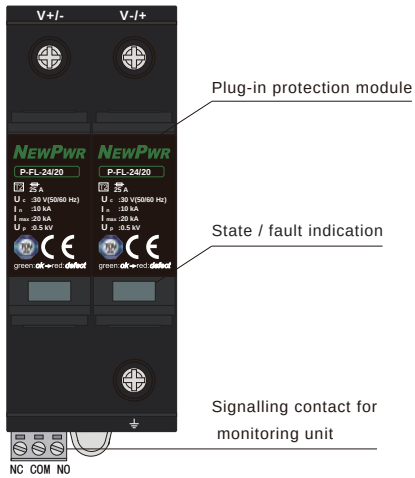
It can use for 24VDC power system, protected terminal equipment, limit surge and meet to a safety voltage. comprising a base part and a plug-in protection modulel.

It is suitable for LPZ1 ~ LPZ2 area and higher.

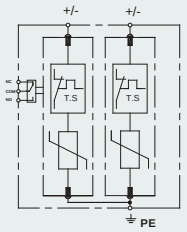
Parameter

Technology	MOV
Nominal voltage Un	24 Vdc
Max. continuous operating voltage Uc	48 Vdc
Nominal discharge current In(8/20 μs)	10 kA
Max. discharge current Imax(8/20 μs)	20 kA
Voltage protection level Up	0.5 kV
Voltage protection level(5kA) Up	0.3 kV
Cross-sectional area (min.)	1.5 mm^2 stranded / flexible
Cross-sectional area (max.)	25 mm^2 stranded / flexible
Response time Ta	≤ 25 ns
Max. overcurrent protection	≤ 25 A gL/gG or SCB(P-SC-385/40×2P)
Remote communication function	P-FL-24/20.DR
Switching capacity	125 VAC/1A,125 VDC/0.2A
Operating state / fault indication	Green / red
General perameters	
Operating temperature range	-40 °C ~ +80 °C
Installtion	35 mm DIN
Enclosure dimensions (H×W×D)	90 mm × 36 mm × 66 mm
Location category	Indoor only
Enclosure material	Thermoplastic
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-11/ EN 61643-11

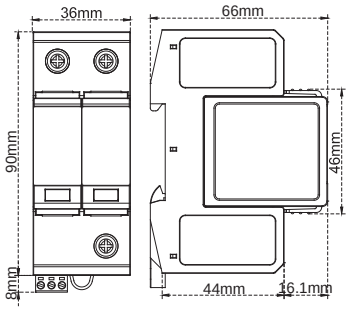
Graphics



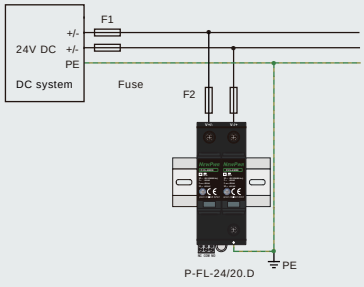
Schematic



Dimensions



Application



DC Systems（20kA，T3） P-FL-48/20.D

Features

- A base part and a plug-in protection module
- Patented large arc extinguisher technology
- Module unlock button, anti-vibration
- Status indicator, remote alarm
- 48VDC Power System
- 35 mm rail installation

Discription

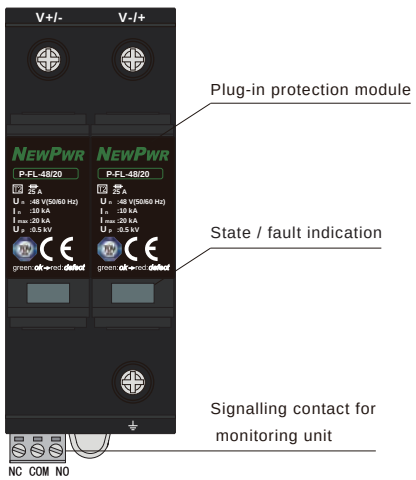
It can use for 48VDC power system, protected terminal equipment, limit surge and meet to a safety voltage. comprising a base part and a plug-in protection modulel.

It is suitable for LPZ1 ~ LPZ2 area and higher.

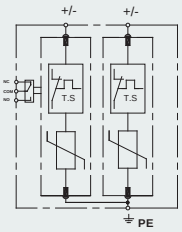
Parameter

Technology	MOV
Nominal voltage Un	48 Vdc
Max. continuous operating voltage Uc	60 Vdc
Nominal discharge current In(8/20 μs)	10 kA
Max. discharge current Imax(8/20 μs)	20 kA
Voltage protection level Up	0.5 kV
Voltage protection level(5kA) Up	0.3 kV
Cross-sectional area (min.)	1.5 mm^2 stranded / flexible
Cross-sectional area (max.)	25 mm^2 stranded / flexible
Response time Ta	≤ 25 ns
Max. overcurrent protection	≤ 25 A gL/gG or SCB(P-SC-385/40×2P)
Remote communication function	P-FL-48/20.DR
Switching capacity	125 VAC/1A,125 VDC/0.2A
Operating state / fault indication	Green / red
General perameters	
Operating temperature range	-40 °C ~ +80 °C
Installtion	35 mm DIN
Enclosure dimensions (H×W×D)	90 mm × 36 mm × 66 mm
Location category	Indoor only
Enclosure material	Thermoplastic
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-11/ EN 61643-11

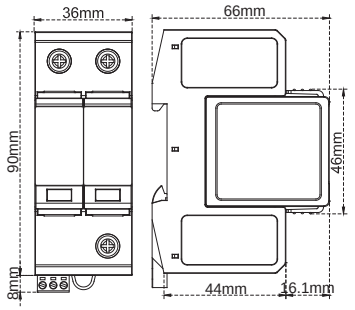
Graphics



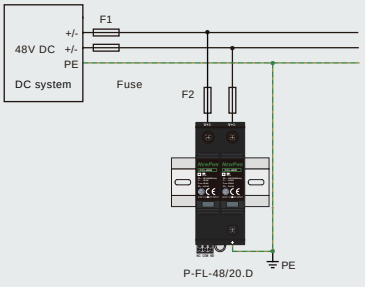
Schematic



Dimensions



Application



PV systems（40kA，T2） P-FL-1200/40.PV

Features

- A base part and a plug-in protection module
- Patented large arc extinguisher technology
- Module unlock button, anti-vibration
- Status indicator, remote alarm
- PV Power System
- 35 mm rail installation

Discription

According to IEC and GB standard，SPD can release high voltage pulse energy,and limit surge in a safety voltage level.

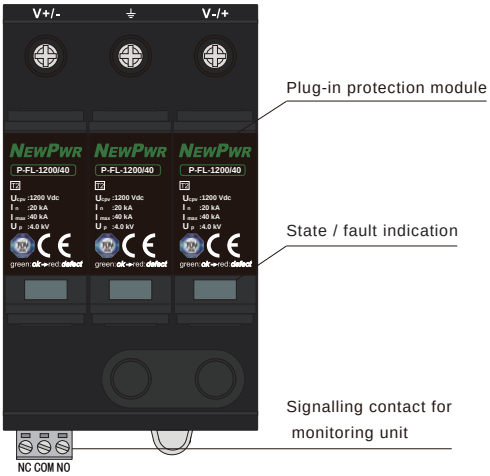
The complete device consists of a base module and plug-in protection modules and is ready for installation.

It is suitable for LPZ0B ~ LPZ1 area and higher.

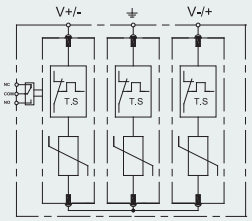
Parameter

Technology	MOV
Max. continuous operating d.c. voltage Ucpv	1200 Vdc
Short-circuit withstand capacity Iscpv	1000 A
Nominal discharge current In(8/20 μs)	20 kA
Max. discharge current Imax(8/20 μs)	40 kA
Voltage protection level Up	4.0 kV
Voltage protection level(5kA) Up	3.0 kV
Cross-sectional area (min.)	1.5 mm^2 stranded / flexible
Cross-sectional area (max.)	25 mm^2 stranded / flexible
Response time Ta	≤ 25 ns
Remote communication function	P-FL-1200/40.PVR
Switching capacity	125 VAC/1A,125 VDC/0.2A
Operating state / fault indication	Green / red
General perameters	
Operating temperature range	-40 °C ~ +80 °C
Installtion	35 mm DIN
Enclosure dimensions (H×W×D)	90 mm × 54 mm × 66 mm
Location category	Indoor only
Enclosure material	Thermoplastic
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	EN 50539-11
Power system	PV system

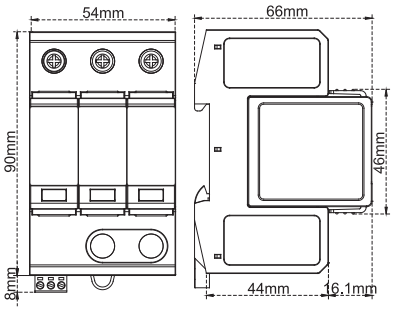
图解



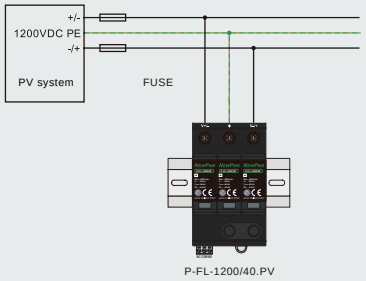
Schematic



Dimensions



Application



Features

- A base part and a plug-in protection module
- Patented large arc extinguisher technology
- Module unlock button, anti-vibration
- Status indicator, remote alarm
- Single-phase(TT) AC system
- 35 mm rail installation

Discription

According to IEC and GB standard，SPD can release high voltage pulse energy,and limit surge in a safety voltage level.

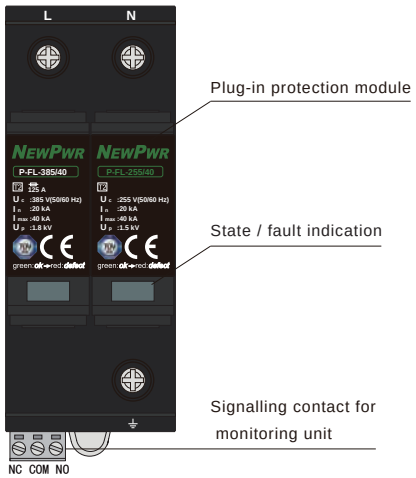
The complete device consists of a base module and plug-in protection modules and is ready for installation.

It is suitable for LPZ0B ~ LPZ1 area and higher.

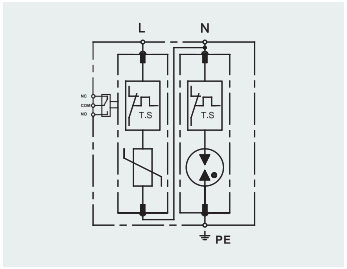
Parameter

Technology	MOV&GDT
Nominal voltage Un	230/400 Vac
Max. continuous operating voltage Uc	385 Vac(L-N), 255 Vac(N-PE)
Nominal discharge current In(8/20 μs)	20 kA
Max. discharge current Imax(8/20 μs)	40 kA
Voltage protection level Up	1.8 kV(L-N), 1.5 kV(N-PE)
Voltage protection level(5kA) Up	1.3 kV
Cross-sectional area (min.)	1.5 mm^2 stranded / flexible
Cross-sectional area (max.)	25 mm^2 stranded / flexible
Response time Ta	≤ 25 ns
Max. overcurrent protection	≤ 125 A gL/gG or SCB(P-SC-385/40×1P)
Remote communication function	P-FL-385/40×P+NR
Switching capacity	125 VAC/1A,125 VDC/0.2A
Operating state / fault indication	Green / red
General perameters	
Operating temperature range	-40 °C ~ +80 °C
Installtion	35 mm DIN
Enclosure dimensions (H×W×D)	90 mm × 36 mm × 66 mm
Location category	Indoor only
Enclosure material	Thermoplastic
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-11/ EN 61643-11
Power system	single-phase（TT system）

Graphics



Schematic



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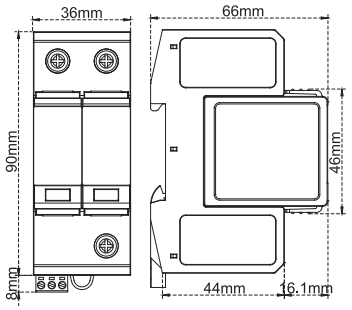
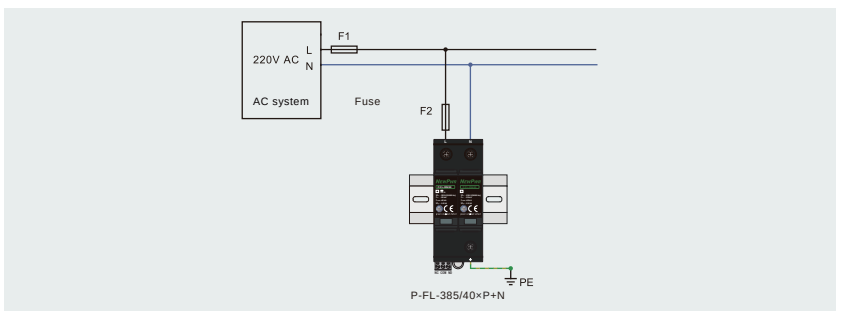


Application



Features

- A base part and a plug-in protection module
- Patented large arc extinguisher technology
- Module unlock button, anti-vibration
- Status indicator, remote alarm
- Single-phase(TN-S) AC system
- 35 mm rail installation

Discription

According to IEC and GB standard，SPD can release high voltage pulse energy,and limit surge in a safety voltage level.

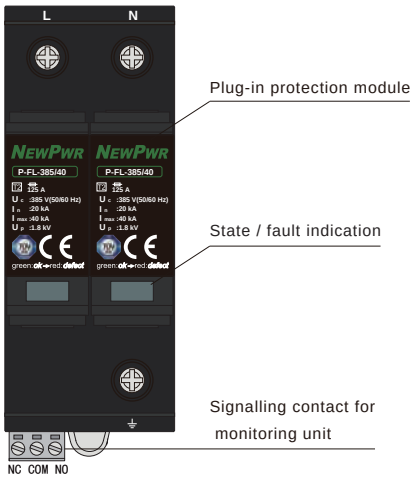
The complete device consists of a base module and plug-in protection modules and is ready for installation.

It is suitable for LPZ0B ~ LPZ1 area and higher.

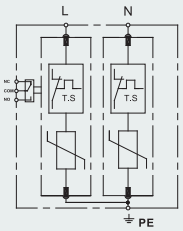
Parameter

Technology	MOV
Nominal voltage Un	230/400 Vac
Max. continuous operating voltage Uc	385 Vac
Nominal discharge current In(8/20 μs)	20 kA
Max. discharge current Imax(8/20 μs)	40 kA
Voltage protection level Up	1.8 kV
Voltage protection level(5kA) Up	1.3 kV
Cross-sectional area (min.)	1.5 mm^2 stranded / flexible
Cross-sectional area (max.)	25 mm^2 stranded / flexible
Response time Ta	≤ 25 ns
Max. overcurrent protection	≤ 125 A gL/gG or SCB(P-SC-385/40×2P)
Remote communication function	P-FL-385/40×2PR
Switching capacity	125 VAC/1A,125 VDC/0.2A
Operating state / fault indication	Green / red
General perameters	
Operating temperature range	-40 °C ~ +80 °C
Installtion	35 mm DIN
Enclosure dimensions (H×W×D)	90 mm × 36 mm × 66 mm
Location category	Indoor only
Enclosure material	Thermoplastic
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-11/ EN 61643-11
Power system	single-phase（TN-S system）

Graphics



Schematic



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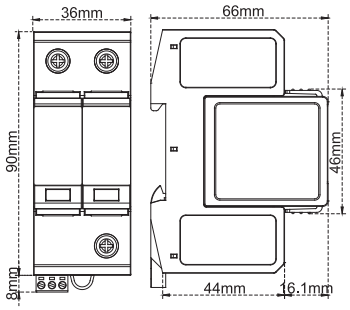
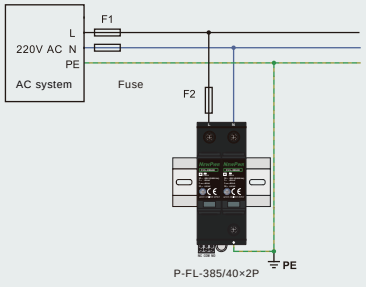


Application



Features

- A base part and a plug-in protection module
- Patented large arc extinguisher technology
- Module unlock button, anti-vibration
- Status indicator, remote alarm
- Three-phase(TN-C、IT) AC system
- 35 mm rail installation

Discription

According to IEC and GB standard，SPD can release high voltage pulse energy,and limit surge in a safety voltage level.

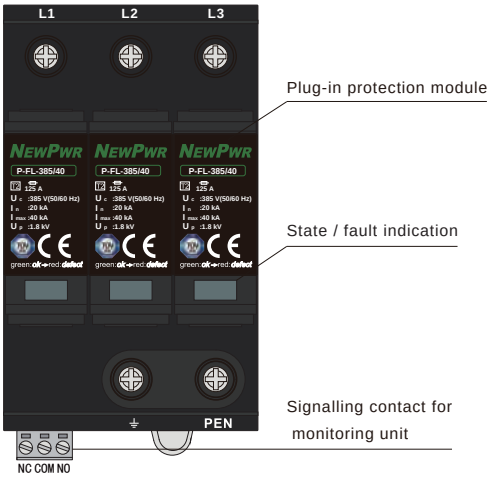
The complete device consists of a base module and plug-in protection modules and is ready for installation.

It is suitable for LPZ0B ~ LPZ1 area and higher.

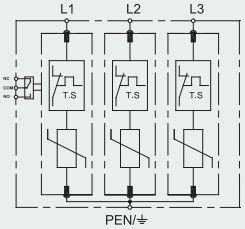
Parameter

Technology	MOV
Nominal voltage Un	230/400 Vac
Max. continuous operating voltage Uc	385 Vac
Nominal discharge current In(8/20 μs)	20 kA
Max. discharge current Imax(8/20 μs)	40 kA
Voltage protection level Up	1.8 kV
Voltage protection level(5kA) Up	1.3 kV
Cross-sectional area (min.)	1.5 mm^2 stranded / flexible
Cross-sectional area (max.)	25 mm^2 stranded / flexible
Response time Ta	≤ 25 ns
Max. overcurrent protection	≤ 125 A gL/gG or SCB(P-SC-385/40×3P)
Remote communication function	P-FL-385/40×3PR
Switching capacity	125 VAC/1A,125 VDC/0.2A
Operating state / fault indication	Green / red
General perameters	
Operating temperature range	-40 °C ~ +80 °C
Installtion	35 mm DIN
Enclosure dimensions (H×W×D)	90 mm × 54 mm × 66 mm
Location category	Indoor only
Enclosure material	Thermoplastic
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-11/ EN 61643-11
Power system	Three-phase(TN-C、IT) AC system

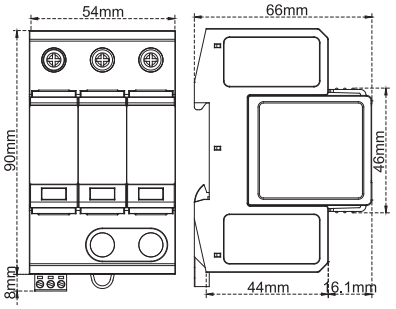
Graphics



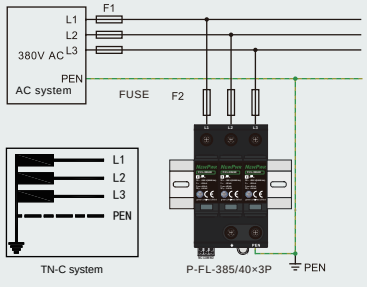
Schematic



Dimensions



Application



Features

- A base part and a plug-in protection module
- Patented large arc extinguisher technology
- Module unlock button, anti-vibration
- Status indicator, remote alarm
- Three-phase(TN-S、TT) AC system
- 35 mm rail installation

Discription

According to IEC and GB standard，SPD can release high voltage pulse energy,and limit surge in a safety voltage level.

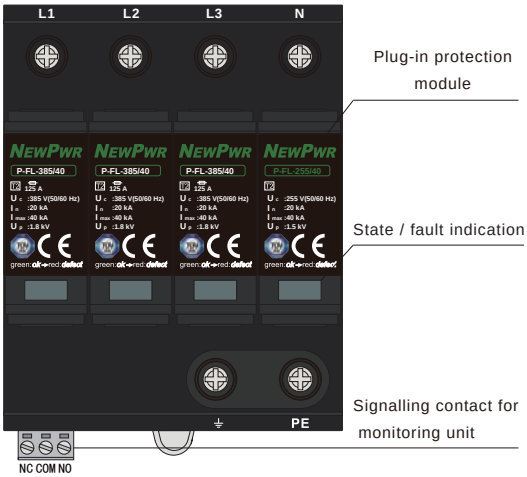
The complete device consists of a base module and plug-in protection modules and is ready for installation.

It is suitable for LPZ0B ~ LPZ1 area and higher.

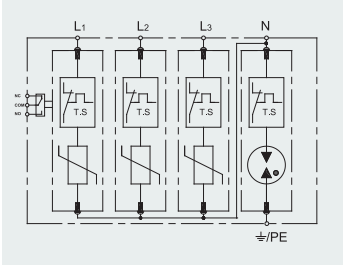
Parameter

Technology	MOV&GDT
Nominal voltage Un	230/400 Vac
Max. continuous operating voltage Uc	385 Vac(L-N), 255 Vac(N-PE)
Nominal discharge current In(8/20 μs)	20 kA
Max. discharge current Imax(8/20 μs)	40 kA
Voltage protection level Up	1.8 kV(L-N), 1.5 kV(N-PE)
Voltage protection level(5kA) Up	1.3 kV
Cross-sectional area (min.)	1.5 mm^2 stranded / flexible
Cross-sectional area (max.)	25 mm^2 stranded / flexible
Response time Ta	≤ 25 ns
Max. overcurrent protection	≤ 125 A gL/gG or SCB(P-SC-385/40×3P)
Remote communication function	P-FL-385/40×3P+NR
Switching capacity	125 VAC/1A,125 VDC/0.2A
Operating state / fault indication	Green / red
General perameters	
Operating temperature range	-40 °C ~ +80 °C
Installtion	35 mm DIN
Enclosure dimensions (H×W×D)	90 mm × 72 mm × 66 mm
Location category	Indoor only
Enclosure material	Thermoplastic
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-11/ EN 61643-11
Power system	Three-phase(TN-S、TT) AC system

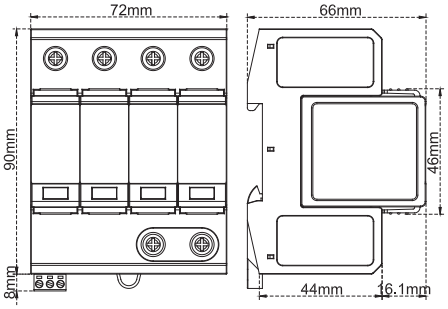
Graphics



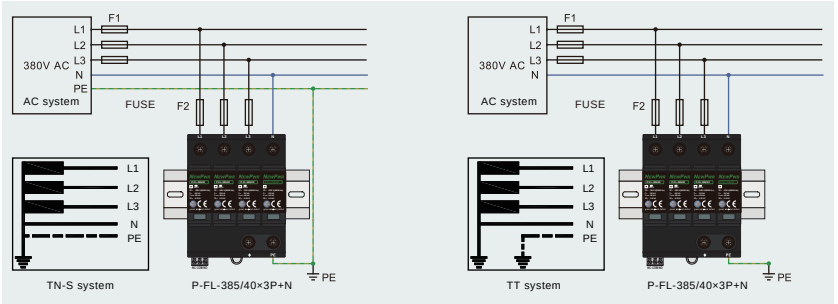
Schematic



Dimensions



Application



Features

- A base part and a plug-in protection module
- Patented large arc extinguisher technology
- Module unlock button, anti-vibration
- Status indicator, remote alarm
- Single-phase(TT) AC system
- 35 mm rail installation

Discription

According to IEC and GB standard，SPD can release high voltage pulse energy,and limit surge in a safety voltage level.

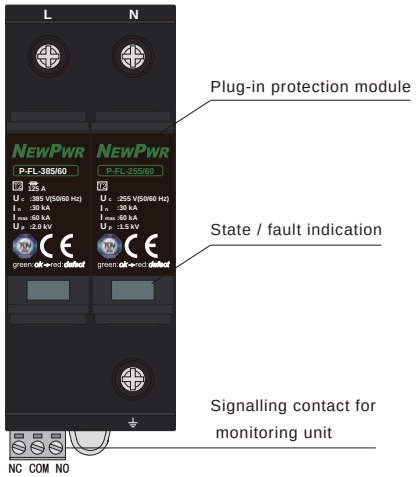
The complete device consists of a base module and plug-in protection modules and is ready for installation.

It is suitable for LPZ0B ~ LPZ1 area and higher.

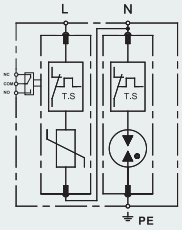
Parameter

Technology	MOV&GDT
Nominal voltage Un	230/400 Vac
Max. continuous operating voltage Uc	385 Vac(L-N), 255 Vac(N-PE)
Nominal discharge current In(8/20 μs)	30 kA
Max. discharge current Imax(8/20 μs)	60 kA
Voltage protection level Up	2.0 kV(L-N), 1.5 kV(N-PE)
Voltage protection level(5kA) Up	1.3 kV
Cross-sectional area (min.)	1.5 mm^2 stranded / flexible
Cross-sectional area (max.)	25 mm^2 stranded / flexible
Response time Ta	≤ 25 ns
Max. overcurrent protection	≤ 125 A gL/gG or SCB(P-SC-385/60×1P)
Remote communication function	P-FL-385/60×P+NR
Switching capacity	125 VAC/1A,125 VDC/0.2A
Operating state / fault indication	Green / red
General perameters	
Operating temperature range	-40 °C ~ +80 °C
Installtion	35 mm DIN
Enclosure dimensions (H×W×D)	90 mm × 36 mm × 66 mm
Location category	Indoor only
Enclosure material	Thermoplastic
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-11/ EN 61643-11
Power system	single-phase（TT system）

Graphics



Schematic



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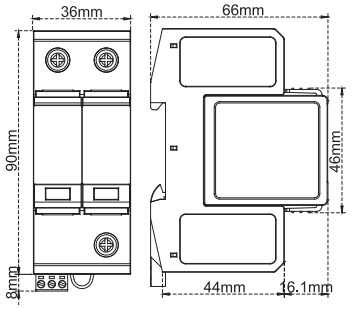
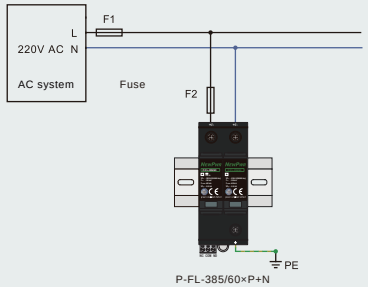


Application



Features

- A base part and a plug-in protection module
- Patented large arc extinguisher technology
- Module unlock button, anti-vibration
- Status indicator, remote alarm
- Single-phase(TN-S) AC system
- 35 mm rail installation

Discription

According to IEC and GB standard，SPD can release high voltage pulse energy,and limit surge in a safety voltage level.

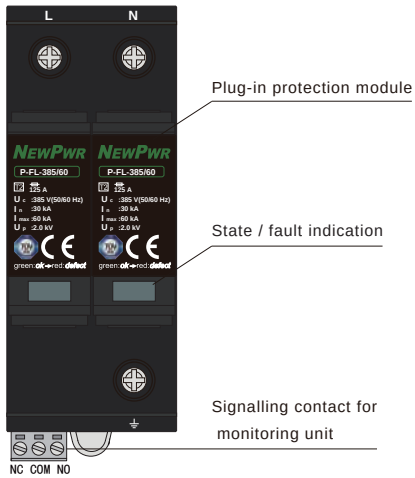
The complete device consists of a base module and plug-in protection modules and is ready for installation.

It is suitable for LPZ0B ~ LPZ1 area and higher.

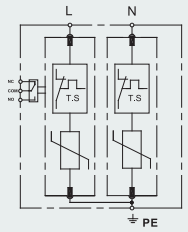
Parameter

Technology	MOV
Nominal voltage Un	230/400 Vac
Max. continuous operating voltage Uc	385 Vac
Nominal discharge current In(8/20 μs)	30 kA
Max. discharge current Imax(8/20 μs)	60 kA
Voltage protection level Up	2.0 kV
Voltage protection level(5kA) Up	1.3 kV
Cross-sectional area (min.)	1.5 mm^2 stranded / flexible
Cross-sectional area (max.)	25 mm^2 stranded / flexible
Response time Ta	≤ 25 ns
Max. overcurrent protection	≤ 125 A gL/gG or SCB(P-SC-385/60×2P)
Remote communication function	P-FL-385/60×2PR
Switching capacity	125 VAC/1A,125 VDC/0.2A
Operating state / fault indication	Green / red
General perameters	
Operating temperature range	-40 °C ~ +80 °C
Installtion	35 mm DIN
Enclosure dimensions (H×W×D)	90 mm × 36 mm × 66 mm
Location category	Indoor only
Enclosure material	Thermoplastic
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-11/ EN 61643-11
Power system	single-phase（TN-S system）

Graphics



Schematic



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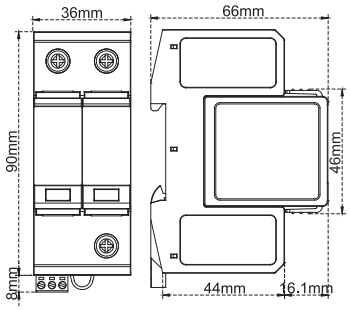
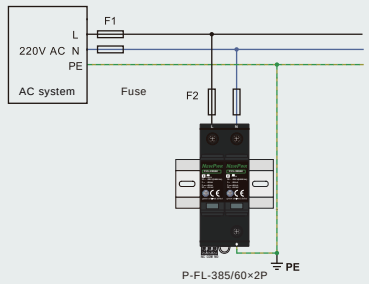


Application



Features

- A base part and a plug-in protection module
- Patented large arc extinguisher technology
- Module unlock button, anti-vibration
- Status indicator, remote alarm
- Three-phase(TN-C、IT) AC system
- 35 mm rail installation

Discription

According to IEC and GB standard，SPD can release high voltage pulse energy,and limit surge in a safety voltage level.

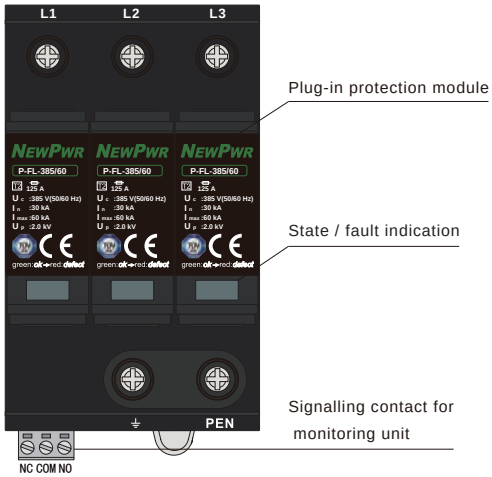
The complete device consists of a base module and plug-in protection modules and is ready for installation.

It is suitable for LPZ0B ~ LPZ1 area and higher.

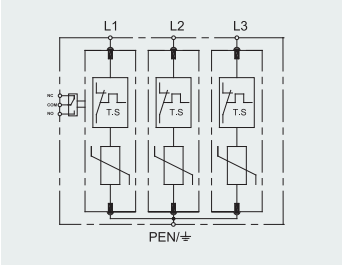
Parameter

Technology	MOV
Nominal voltage Un	230/400 Vac
Max. continuous operating voltage Uc	385 Vac
Nominal discharge current In(8/20 μs)	30 kA
Max. discharge current Imax(8/20 μs)	60 kA
Voltage protection level Up	2.0 kV
Voltage protection level(5kA) Up	1.3 kV
Cross-sectional area (min.)	1.5 mm^2 stranded / flexible
Cross-sectional area (max.)	25 mm^2 stranded / flexible
Response time Ta	≤ 25 ns
Max. overcurrent protection	≤ 125 A gL/gG or SCB(P-SC-385/60×3P)
Remote communication function	P-FL-385/60×3PR
Switching capacity	125 VAC/1A,125 VDC/0.2A
Operating state / fault indication	Green / red
General perameters	
Operating temperature range	-40 °C ~ +80 °C
Installtion	35 mm DIN
Enclosure dimensions (H×W×D)	90 mm × 54 mm × 66 mm
Location category	Indoor only
Enclosure material	Thermoplastic
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-11/ EN 61643-11
Power system	Three-phase(TN-C、IT) AC system

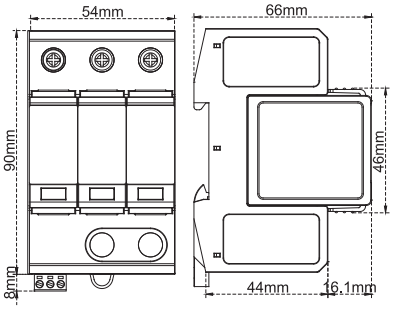
Graphics



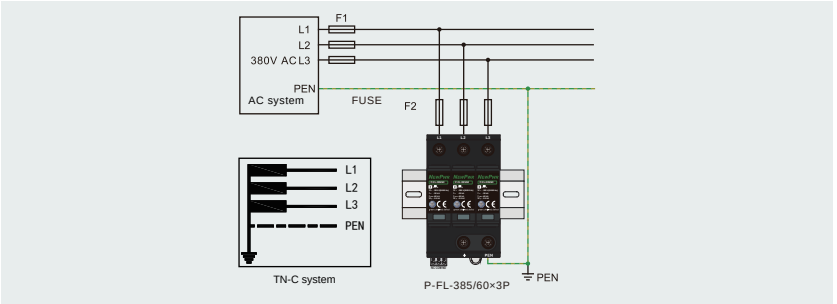
Schematic



Dimensions



Application



Features

- A base part and a plug-in protection module
- Patented large arc extinguisher technology
- Module unlock button, anti-vibration
- Status indicator, remote alarm
- Three-phase(TN-S、TT) AC system
- 35 mm rail installation

Discription

According to IEC and GB standard，SPD can release high voltage pulse energy,and limit surge in a safety voltage level.

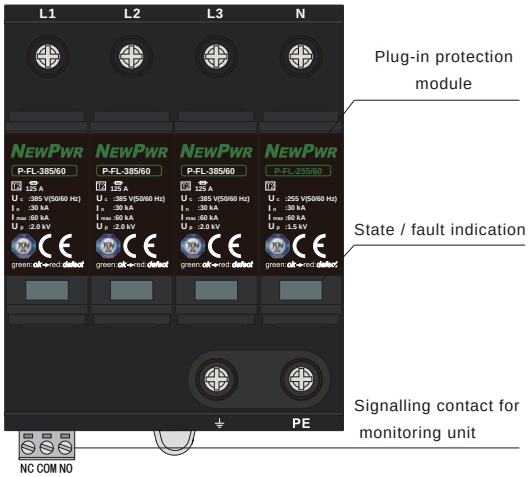
The complete device consists of a base module and plug-in protection modules and is ready for installation.

It is suitable for LPZ0B ~ LPZ1 area and higher.

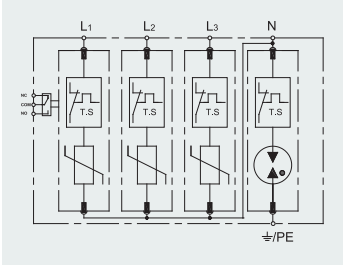
Parameter

Technology	MOV&GDT
Nominal voltage Un	230/400 Vac
Max. continuous operating voltage Uc	385 Vac(L-N), 255 Vac(N-PE)
Nominal discharge current In(8/20 μs)	30 kA
Max. discharge current Imax(8/20 μs)	60 kA
Voltage protection level Up	2.0 kV(L-N), 1.5 kV(N-PE)
Voltage protection level(5kA) Up	1.3 kV
Cross-sectional area (min.)	1.5 mm^2 stranded / flexible
Cross-sectional area (max.)	25 mm^2 stranded / flexible
Response time Ta	≤ 25 ns
Max. overcurrent protection	≤ 125 A gL/gG or SCB(P-SC-385/60×3P)
Remote communication function	P-FL-385/65×3P+NR
Switching capacity	125 VAC/1A,125 VDC/0.2A
Operating state / fault indication	Green / red
General perameters	
Operating temperature range	-40 °C ~ +80 °C
Installtion	35 mm DIN
Enclosure dimensions (H×W×D)	90 mm × 72 mm × 66 mm
Location category	Indoor only
Enclosure material	Thermoplastic
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-11/ EN 61643-11
Power system	Three-phase(TN-S、TT) AC system

Graphics



Schematic



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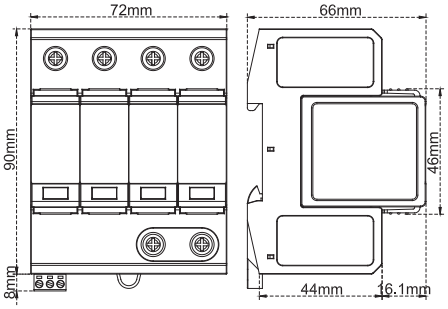
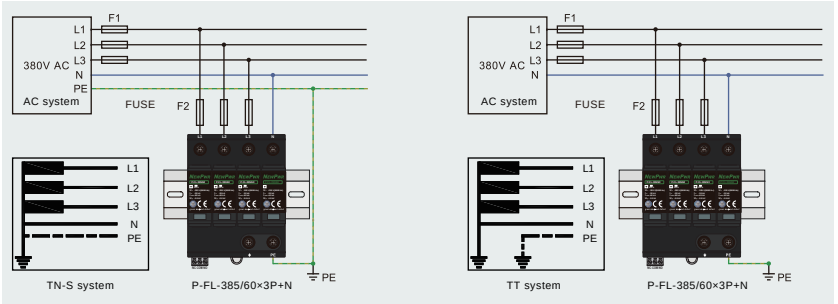


Application



Features

- A base part and a plug-in protection module
- Module unlock button, anti-vibration
- Status indicator, remote alarm
- Single-phase(TT) AC system
- 35 mm rail installation

Discription

According to IEC and GB standard，SPD can release high voltage pulse energy,and limit surge in a safety voltage level.

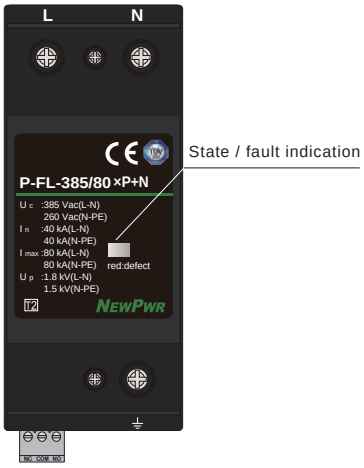
The complete device consists of a base module and plug-in protection modules and is ready for installation.

It is suitable for LPZ0B ~ LPZ1 area and higher.

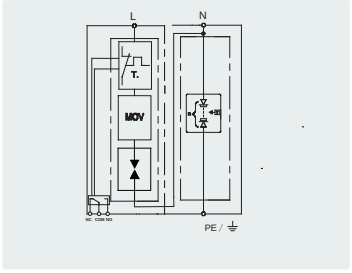
Parameter

Technology	Gap&MOV
Nominal voltage Un	240/415 Vac
Max. continuous operating voltage Uc	385 Vac(L-N), 260 Vac(N-PE)
Nominal discharge current In(8/20 μs)	40 kA
Max. discharge current Imax(8/20 μs)	80 kA
Voltage protection level Up	1.8 kV(L-N), 1.5 kV(N-PE)
Voltage protection level(5kA) Up	1.0 kV
Cross-sectional area (min.)	1.5 mm^2 stranded / flexible
Cross-sectional area (max.)	25 mm^2 stranded / flexible
Response time Ta	≤ 100 ns
Max. overcurrent protection	≤ 125 A gL/gG or SCB(P-SC-385/80×1P)
Remote communication function	P-FL-385/80×P+NR
Switching capacity	Max: 125 VAC/1A, Min: 5 V/1mA
Operating state / fault indication	Green / red
General perameters	
Operating temperature range	-40 °C ~ +85 °C
Installtion	35 mm DIN
Enclosure dimensions (H×W×D)	90 mm × 38.5 mm × 68.5 mm
Location category	Indoor only
Enclosure material	Thermoplastic
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-11/ EN 61643-11
Power system	single-phase（TT system）

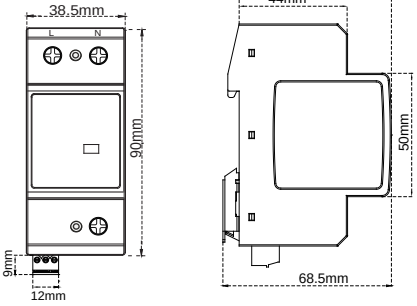
Graphics



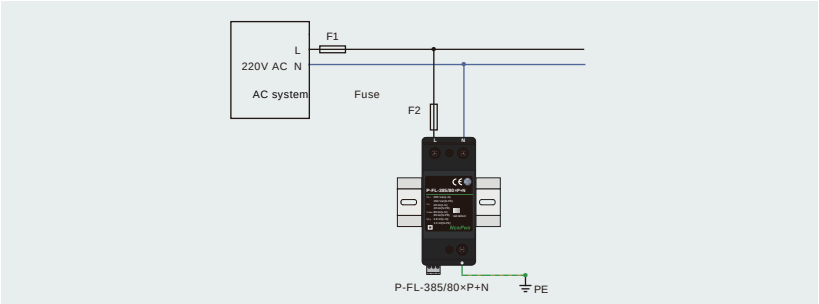
Schematic



Dimensions



Application



Features

- A base part and a plug-in protection module
- Module unlock button, anti-vibration
- Status indicator, remote alarm
- Single-phase(TN-S) AC system（T2）
- 35 mm rail installation

Discription

According to IEC and GB standard，SPD can release high voltage pulse energy,and limit surge in a safety voltage level.

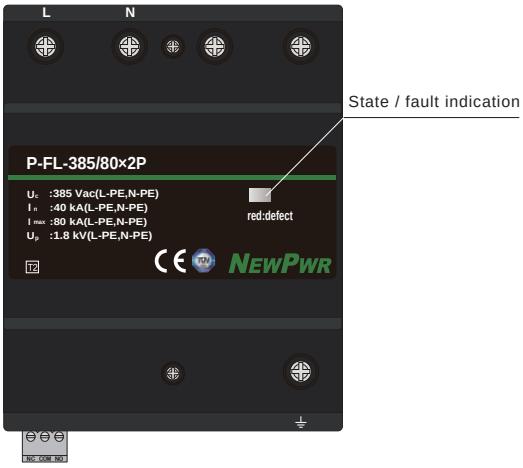
The complete device consists of a base module and plug-in protection modules and is ready for installation.

It is suitable for LPZ0B ~ LPZ1 area and higher.

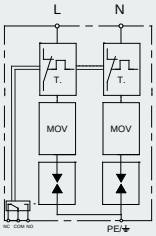
Parameter

Technology	Gap&MOV
Nominal voltage Un	240/415 Vac
Max. continuous operating voltage Uc	385 Vac
Nominal discharge current In(8/20 μs)	40 kA
Max. discharge current Imax(8/20 μs)	80 kA
Voltage protection level Up	1.8 kV
Voltage protection level(5kA) Up	1.0 kV
Cross-sectional area (min.)	1.5 mm^2 stranded / flexible
Cross-sectional area (max.)	25 mm^2 stranded / flexible
Response time Ta	≤ 100 ns
Max. overcurrent protection	≤ 125 A gL/gG or SCB(P-SC-385/80×2P)
Remote communication function	P-FL-385/80×2PR
Switching capacity	Max: 125 VAC/1A, Min: 5 V/1mA
Operating state / fault indication	Green / red
General perameters	
Operating temperature range	-40 °C ~ +85 °C
Installtion	35 mm DIN
Enclosure dimensions (H×W×D)	90 mm × 73 mm × 68.5 mm
Location category	Indoor only
Enclosure material	Thermoplastic
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-11/ EN 61643-11
Power system	single-phase（TN-S system）

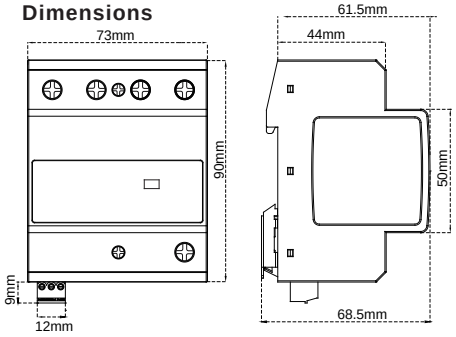
Graphics



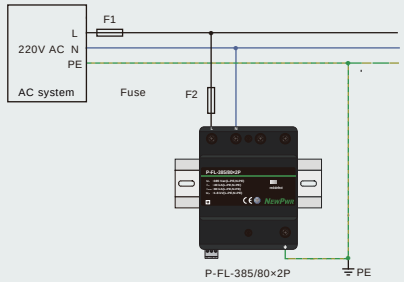
Schematic



Dimensions



Application



Features

- A base part and a plug-in protection module
- Module unlock button, anti-vibration
- Status indicator, remote alarm
- Three-phase(TN-C、IT) AC system
- 35 mm rail installation

Discription

According to IEC and GB standard，SPD can release high voltage pulse energy,and limit surge in a safety voltage level.

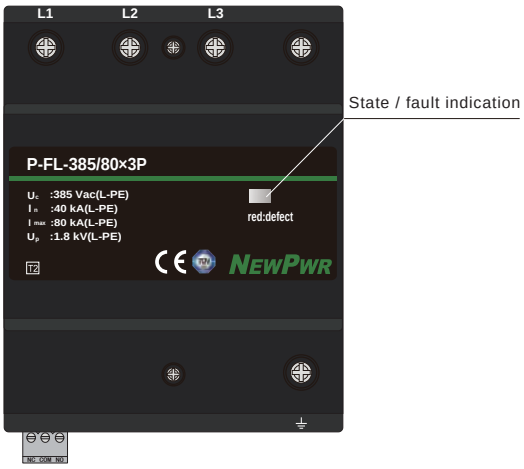
The complete device consists of a base module and plug-in protection modules and is ready for installation.

It is suitable for LPZ0B ~ LPZ1 area and higher.

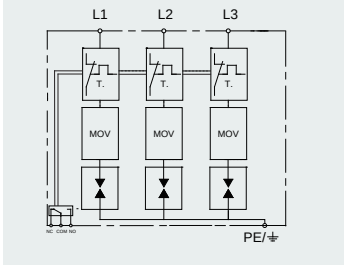
Parameter

Technology	Gap&MOV
Nominal voltage Un	240/415 Vac
Max. continuous operating voltage Uc	385 Vac
Nominal discharge current In(8/20 μs)	40 kA
Max. discharge current Imax(8/20 μs)	80 kA
Voltage protection level Up	1.8 kV
Voltage protection level(5kA) Up	1.0 kV
Cross-sectional area (min.)	1.5 mm^2 stranded / flexible
Cross-sectional area (max.)	25 mm^2 stranded / flexible
Response time Ta	≤ 100 ns
Max. overcurrent protection	≤ 125 A gL/gG or SCB(P-SC-385/80×3P)
Remote communication function	P-FL-385/80×3PR
Switching capacity	Max: 125 VAC/1A, Min: 5 V/1mA
Operating state / fault indication	Green / red
General perameters	
Operating temperature range	-40 °C ~ +85 °C
Installtion	35 mm DIN
Enclosure dimensions (H×W×D)	90 mm × 73 mm × 68.5 mm
Location category	Indoor only
Enclosure material	Thermoplastic
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-11/ EN 61643-11
Power system	Three-phase(TN-C、IT) AC system

Graphics



Schematic



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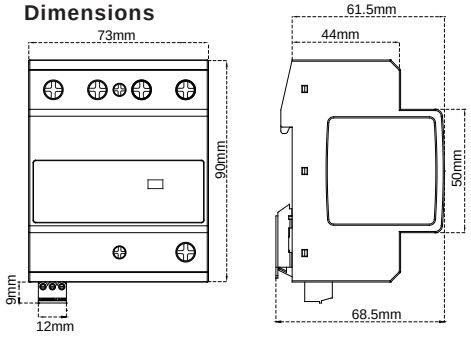
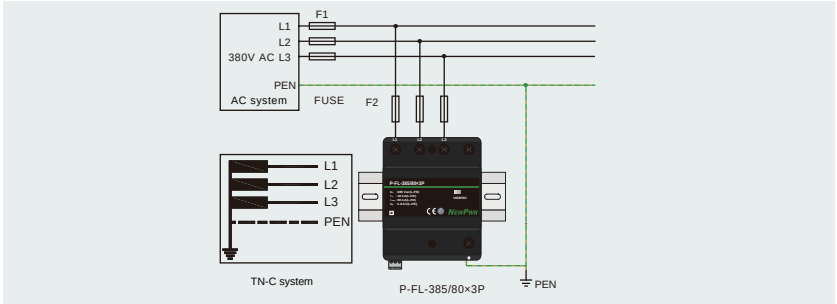


Application



Features

- A base part and a plug-in protection module
- Module unlock button, anti-vibration
- Status indicator, remote alarm
- Three-phase(TN-S、TT) AC system
- 35 mm rail installation

Discription

According to IEC and GB standard，SPD can release high voltage pulse energy,and limit surge in a safety voltage level.

The complete device consists of a base module and plug-in protection modules and is ready for installation.

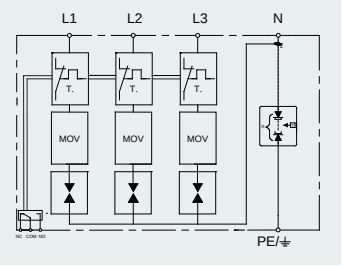
It is suitable for LPZ0B ~ LPZ1 area and higher.

Parameter

Technology	Gap&MOV
Nominal voltage Un	240/415 Vac
Max. continuous operating voltage Uc	385 Vac(L-N), 260 Vac(N-PE)
Nominal discharge current In(8/20 μs)	40 kA
Max. discharge current Imax(8/20 μs)	80 kA
Voltage protection level Up	1.8 kV(L-N), 1.5 kV(N-PE)
Voltage protection level(5kA) Up	1.0 kV
Cross-sectional area (min.)	1.5 mm^2 stranded / flexible
Cross-sectional area (max.)	25 mm^2 stranded / flexible
Response time Ta	≤ 100 ns
Max. overcurrent protection	≤ 125 A gL/gG or SCB(P-SC-385/80×3P)
Remote communication function	P-FL-385/80×3P+NR
Switching capacity	Max: 125 VAC/1A, Min: 5 V/1mA
Operating state / fault indication	Green / red
General perameters	
Operating temperature range	-40 °C ~ +85 °C
Installtion	35 mm DIN
Enclosure dimensions (H×W×D)	90 mm × 73 mm × 68.5 mm
Location category	Indoor only
Enclosure material	Thermoplastic
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-11/ EN 61643-11
Power system	Three-phase(TN-S、TT) AC system

Graphics

Schematic



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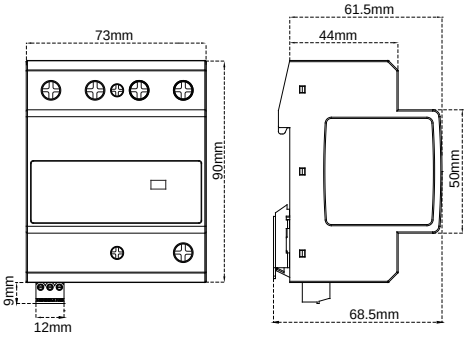
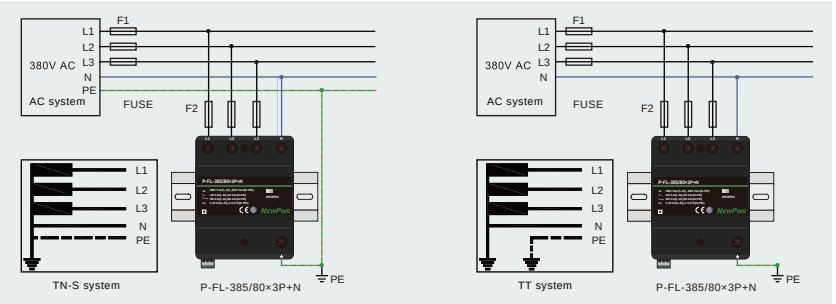


Application



Features

- Reliable thermo disconnect device
- High discharge capacity
- Capable of protecting terminal equipment
- Visual and remote status indication
- Three-phase(TN-S、TT) AC system（T1）
  35 mm rail installation

Discription

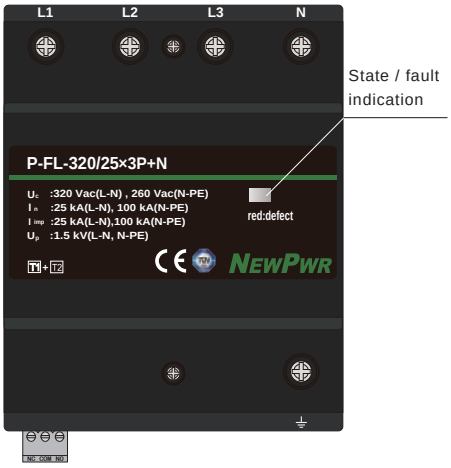
According to IEC and GB standard，SPD can release high voltage pulse energy,and limit surge in a safety voltage level.

It is suitable for LPZ0$_A$ ~ LPZ0$_B$ ~ LPZ1 area and higher.

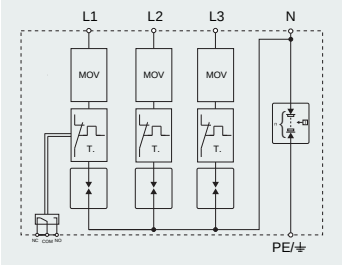
Parameter

Technology	CAP&MOV
Nominal voltage Un	240/415 Vac
Max. continuous operating voltage Uc	320 Vac(L-N),260 Vac(N-PE)
Lightning impulse current Iimp(10/350 μs)	25 kA(L-N),100 kA(N-PE)
Follow current extinguishing capability (Ifi)	Infinite
Voltage protection level Up	1.5 kV(L-N),1.5kV(N-PE)
Voltage protection level(5kA) Up	1.0 kV
Cross-sectional area (min.)	1.5 mm² stranded / flexible
Cross-sectional area (max.)	25 mm² stranded / flexible
Response time Ta	≤ 100 ns
Max. overcurrent protection	≤ 250 A gL/gG or SCB(P-SC-385/25×3P)
Remote communication function	P-FL-320/25×3P+NR
Switching capacity	Max: 125 VAC/1A, Min: 5 V/1mA
Operating state / fault indication	Green / red
General perameters	
Operating temperature range	-40 °C ~ +80 °C
Installtion	35 mm DIN
Enclosure dimensions (H×W×D)	90 mm × 73 mm × 68.5 mm
Location category	Indoor only
Enclosure material	Thermoplastic
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-11/ EN 61643-11
Power system	Three-phase(TN-S、TT) AC system

Graphics



Schematic



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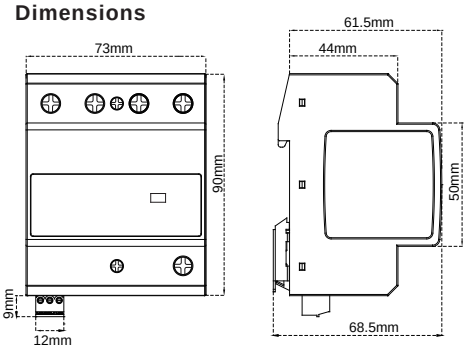
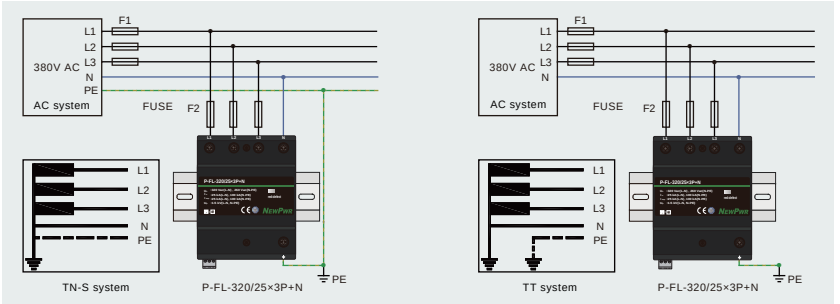


Application



Features

- A base part and a plug-in protection module
- MOV and Spark Gap technology
- Capable of protecting terminal equipment
- Status indicator
- 35 mm rail installation

Discription

According to IEC and GB standard，SPD can release high voltage pulse energy,and limit surge in a safety voltage level.

The complete device consists of a base module and plug-in protection modules and is ready for installation.

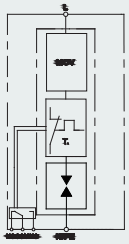
It is suitable for LPZ0A ~ LPZ0B ~ LPZ1 area and higher.

Parameter

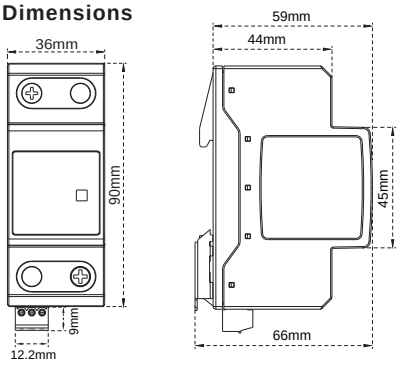
Technology	Gap&MOV
Nominal voltage Un	240/415Vac
Max. continuous operating voltage Uc	440 Vac
Nominal discharge current In(8/20 μs)	25 kA
Lightning impulse current Iimp(10/350 μs)	25 kA
Follow current extinguishing capability (Ifi)	Infinite
Voltage protection level Up	2.4 kV
Voltage protection level(5kA) Up	2.0 kV
Cross-sectional area (min.)	1.5 mm^2 stranded / flexible
Cross-sectional area (max.)	25 mm^2 stranded / flexible
Response time Ta	≤ 100 ns
Max. overcurrent protection	≤ 250 A gL/gG
Remote communication function	P-FL-440/25×PR
Switching capacity	Max:125 VAC/1A,Min:5 V/1mA
Operating state / fault indication	Green / red
General perameters	
Operating temperature range	-40 °C ~ +85 °C
Installtion	35 mm DIN
Enclosure dimensions (H×W×D)	90 mm × 36 mm × 66 mm
Location category	Indoor only
Enclosure material	Thermoplastic
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-11/ EN 61643-11
Power system	single-phase(TN) AC system

Graphics

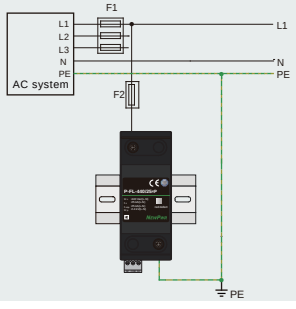
Schematic



Dimensions



Application



Features

- A base part and a plug-in protection module
- Capable of protecting terminal equipment
- Status indicator
- 35 mm rail installation

Discription

According to IEC and GB standard，SPD can release high voltage pulse energy,and limit surge in a safety voltage level.

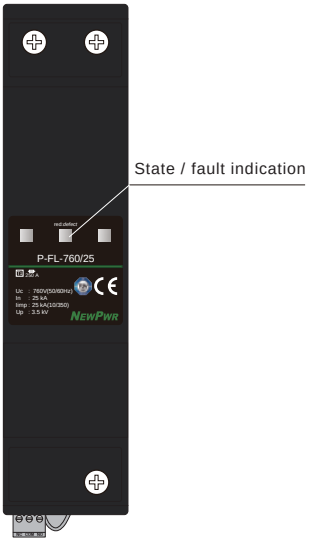
The complete device consists of a base module and plug-in protection modules and is ready for installation.

It is suitable for LPZ0A ~ LPZ0B ~ LPZ1 area and higher.

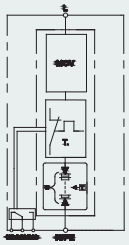
Parameter

Technology	MOV&CDGG
Nominal voltage Un	400/690Vac
Max. continuous operating voltage Uc	760 Vac
Nominal discharge current In(8/20 μs)	25 kA
Lightning impulse current Iimp(10/350 μs)	25 kA
Follow current extinguishing capability (Ifi)	Infinite
Voltage protection level Up	3.5 kV
Voltage protection level(5kA) Up	2.5 kV
Cross-sectional area (min.)	1.5 mm^2 stranded / flexible
Cross-sectional area (max.)	25 mm^2 stranded / flexible
Response time Ta	≤ 100 ns
Max. overcurrent protection	≤ 250 A gL/gG
Remote communication function	P-FL-760/25×PR
Switching capacity	125 VAC/1A,125 VDC/0.2A
Operating state / fault indication	Black/ red
General perameters	
Operating temperature range	-40 °C ~ +80 °C
Installtion	35 mm DIN
Enclosure dimensions (H×W×D)	150 mm × 36 mm × 72 mm
Location category	Indoor only
Enclosure material	Thermoplastic
Flame retardant grade(UL94)	V0
Protection degree	IP20
Standards	IEC 61643-11/ EN 61643-11
Power system	single-phase(TN、TT) AC system

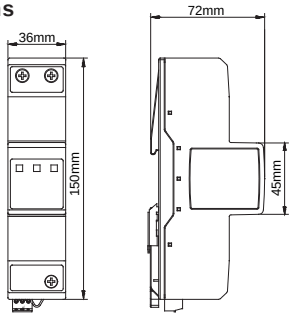
Graphics



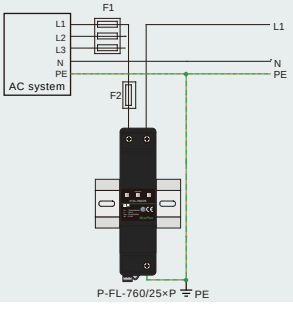
Schematic



Dimensions



Application



SPD plug-in module

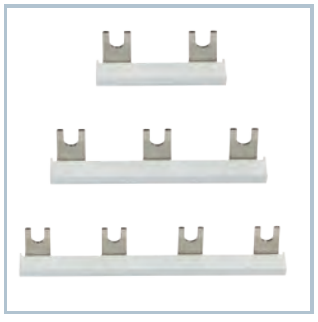
Describe	Model	
it is suitable for P-FL	P-FL-24/20.D-V	P-FL-385/60
	P-FL-1200/40	P-FL-255/40
	P-FL-385/40	P-FL-255/60

SPD base part

Describe	Model	
it is suitable for P-FL	P-FL-30/2P	P-FL-385/3P
	P-FL-1200/PV/3P	P-FL-385/3P+N
	P-FL-385/2P	

Remote terminal

Describe	Model
it is suitable for P-FL	P-FL-YD



Bus-bar

Describe	Model
it is suitable for P-FL (100kA)	P-FL-385/100×2P/B
	P-FL-385/100×3P/B
	P-FL-385/100×3P+N/B

T serial SPD -communication system

Lightning Protection---Security monitoring and other fields
Widely used in petroleum, chemical, building, transportation and other industries.

T serial SPD---Guide

Type	SPD Mode	Nomimal Voltage Un	Protect level	Max. Discharge Current Imax (8/20μs) , C2	Protect voltage Up	Page
Fast Ethernet	T-FL-5-RJ45	5 VDC	Ethernet	10 kA	≤35 V	72
Gigabit Ethernet	T-FL-5-RJ45.CAT6	5 VDC	Ethernet	20 kA	≤35 V	73
Source Ethernet	T-FL-5-RJ45.PoE	5 VDC	Ethernet	20 kA	<75 V	74
RJ45 and power supply	T-FL-24-RJ45.2C	Power: 24 VAC/DC Network: 3 VDC	Power Network	20 kA	Power<300 V Network≤35 V	75
	T-FL-220-RJ45.2C	Power: 220 VAC Network: 3 VDC	Power Network	20 kA	Power<1.5 kV Network≤35 V	76

Features

- RI45 Port standard(100MHz)
- Full shielding design
- Frequency width
- Small insertion loss
- 35 mm rail installation
- Switches, workstations, and all kinds of network communications.

Discription

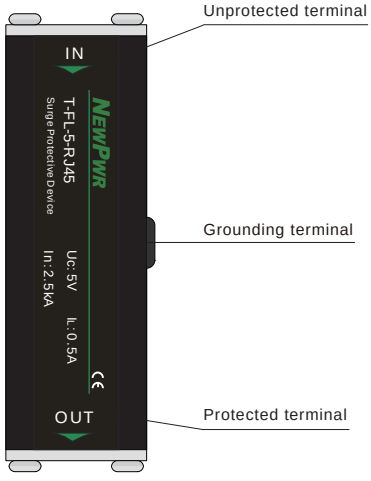
According to IEC and GB standard, SPD can release high voltage pulse energy,and limit surge in a safety voltage level.

It is suitable for LPZ0B ~ LPZ1 area and higher.

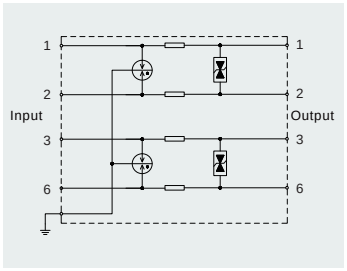
Parameter

Nominal voltage Un	5 VDC
Max. continuous operating voltage Uc	5 VDC
Nominal current I_L	500 mA
Lightning impulse current Iimp(10/350 μs),D1	0.5 kA
Max. discharge current Imax(8/20 μs),C2	10 kA
Nominal discharge current In(8/20 μs),C2	2.5 kA
Voltage protection level Up(8/20 μs),C2	L-L≤35 V/ L-PE≤600 V
Bandwidth fG	100 MHz
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN
Interface mode	RJ45 (female/female)
Grounding conductor specification	1.5 mm², length 250 mm
Material	Metal aluminum
Color	Black
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

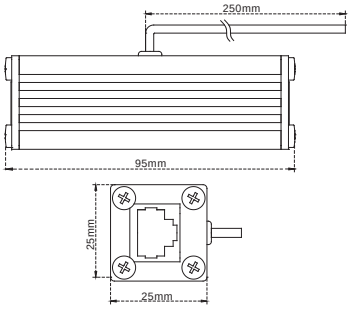
Graphics



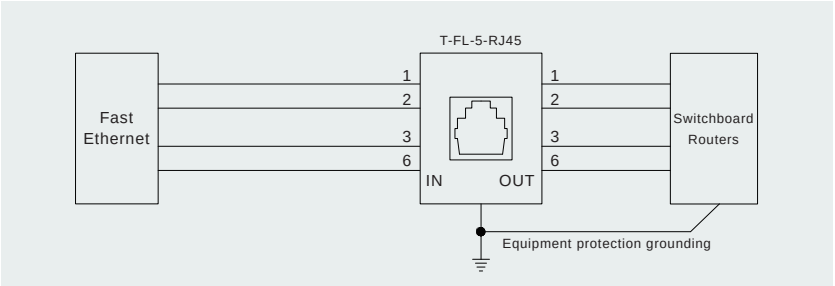
Schematic



Dimensions



Application



Features

- RI45 Port standard(1000MHz)
- Full shielding design
- Frequency width
- Small insertion loss
- 35 mm rail installation
- Switches, workstations, and all kinds of network communications.

Discription

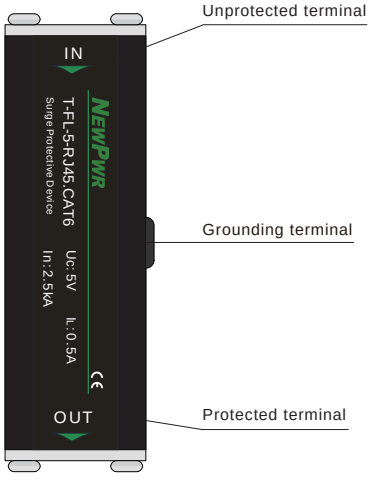
According to IEC and GB standard, SPD can release high voltage pulse energy,and limit surge in a safety voltage level.

It is suitable for LPZ0B ~ LPZ1 area and higher.

Parameter

Nominal voltage Un	5 VDC
Max. continuous operating voltage Uc	5 VDC
Nominal current I_L	500 mA
Lightning impulse current Iimp(10/350 μs),D1	0.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	2.5 kA
Voltage protection level Up(8/20 μs),C2	L-L≤35 V/ L-PE≤600 V
Bandwidth fG	250 MHz
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN
Interface mode	RJ45 (female/female)
Grounding conductor specification	1.5 mm², length 250 mm
Material	Metal aluminum
Color	Black
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics



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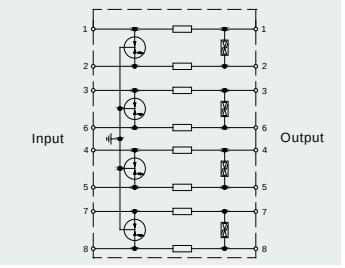

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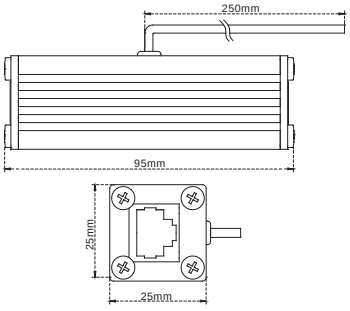
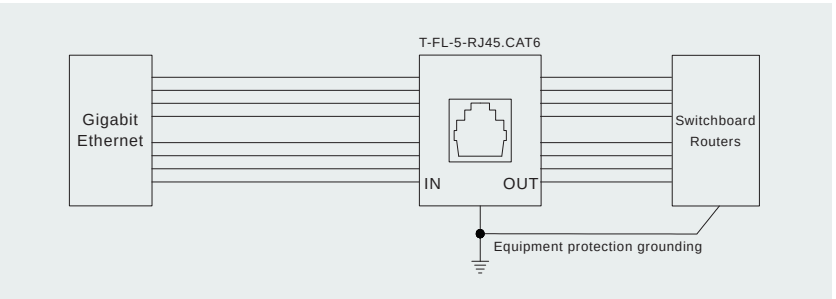


Application



Features

- RI45 Port standard(10/100/1000 M)
- Full shielding design
- Frequency width
- Small insertion loss
- 35 mm rail installation
- POE communication technial

Discription

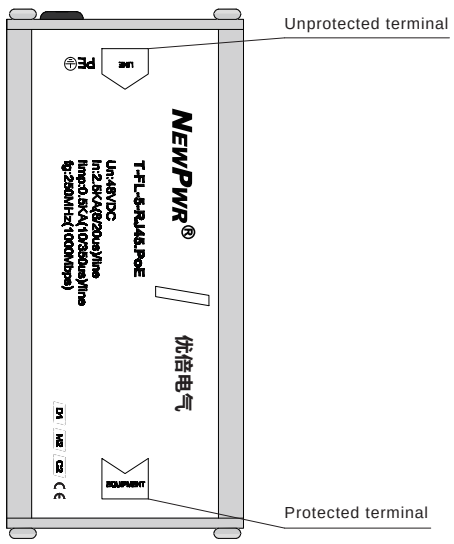
According to IEC and GB standard, SPD can release high voltage pulse energy,and limit surge in a safety voltage level.

It is suitable for LPZ0B ~ LPZ1 area and higher.

Parameter

Nominal voltage Un	signal: 5 VDC power: 48 VDC
Max. continuous operating voltage Uc	signal: 6 VDC power: 68 VDC
Nominal current I_L	1.0 A
Lightning impulse current Iimp(10/350 μs),D1	0.5 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	2.5 kA
Voltage protection level Up(8/20 μs),C2	L-L≤75 V
Bandwidth fG	100 MHz
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN
Interface mode	RJ45 (female/female)
Grounding conductor specification	1.5 mm², length 200 mm
Material	Metal aluminum
Color	Silver
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics



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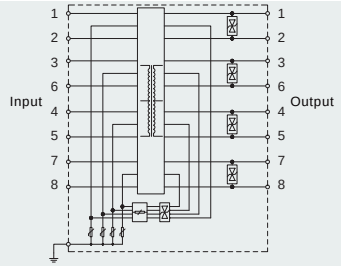

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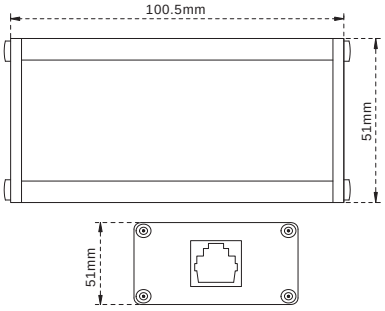
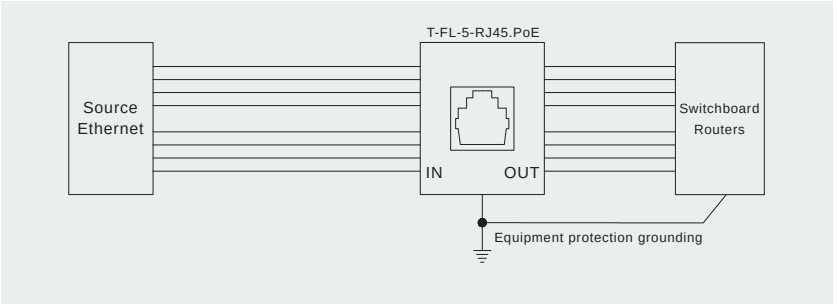


Application



Features

- RI45 Port standard
- Full shielding design
- Frequency width
- Small insertion loss
- 35 mm rail installation
- Protect RJ45 port and 24 VAC/DC power

Discription

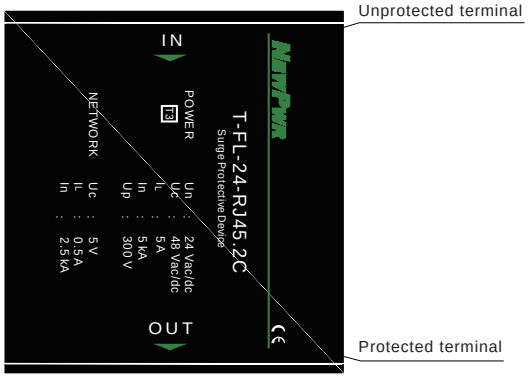
According to IEC and GB standard, SPD can release high voltage pulse energy,and limit surge in a safety voltage level.

It is suitable for LPZ0B ~ LPZ2 area and higher.

Parameter

Nominal voltage Un	Network: 3 VDC Power: 24 VAC/DC
Max. continuous operating voltage Uc	Network: 5 VDC Power: 48 VAC/DC
Nominal current IL	Network: 500 mA Power: 5 A
Lightning impulse current Iimp(10/350 μs),D1	Network: 0.5 kA, Power: 1 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	Network: 2.5 kA, Power: 5 kA
Voltage protection level Up(8/20 μs),C2	Network≤35V(L-L)/600V(L-PE) Power<300 V
Bandwidth fG	100 MHz
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN
Interface mode	RJ45/terminal
Material	Metal aluminum
Color	Black
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics



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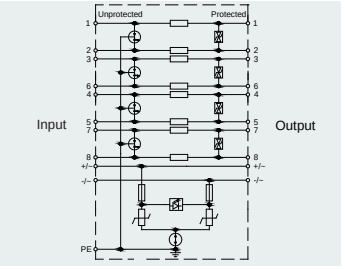
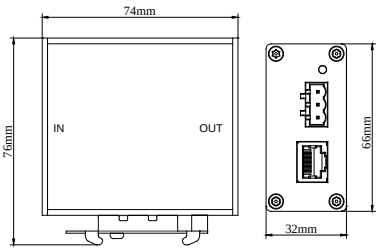
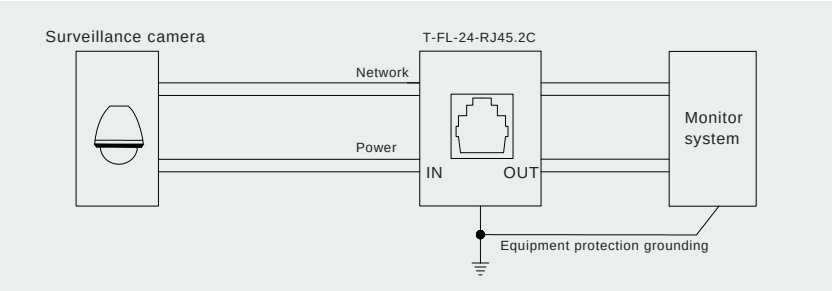


Dimensions



应用 Application



Features

- RI45 Port standard
- Full shielding design
- Frequency width
- Small insertion loss
- 35 mm rail installation
- Protect RJ45 port and 220 VAC/DC power

Discription

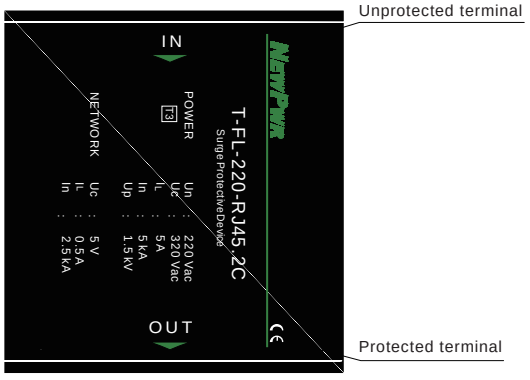
According to IEC and GB standard, SPD can release high voltage pulse energy,and limit surge in a safety voltage level.

It is suitable for LPZ0B ~ LPZ2 area and higher.

Parameter

Nominal voltage Un	Network: 3 VDC Power: 220 VAC
Max. continuous operating voltage Uc	Network: 5 VDC Power: 320 VAC
Nominal current IL	Network: 500 mA Power: 5 A
Lightning impulse current Iimp(10/350 μs),D1	Network: 0.5 kA, Power: 1 kA
Max. discharge current Imax(8/20 μs),C2	20 kA
Nominal discharge current In(8/20 μs),C2	Network: 2.5 kA, Power: 5 kA
Voltage protection level Up(8/20 μs),C2	Network≤35V(L-L)/600V(L-PE) Power<1500 V
Bandwidth fG	100 MHz
Response time Ta	<1 ns
General perameters	
Operating temperature	-40 °C ~ +80 °C
Installtion	35 mm DIN
Interface mode	RJ45/terminal
Material	Metal aluminum
Color	Black
Protection degree	IP20
Standards	IEC 61643-21/ GB/T 18802.21

Graphics



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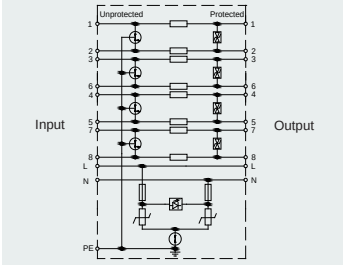

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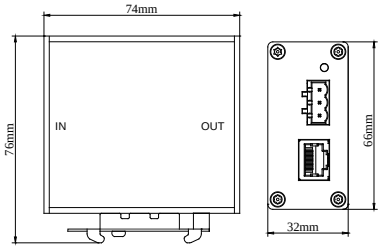

Application