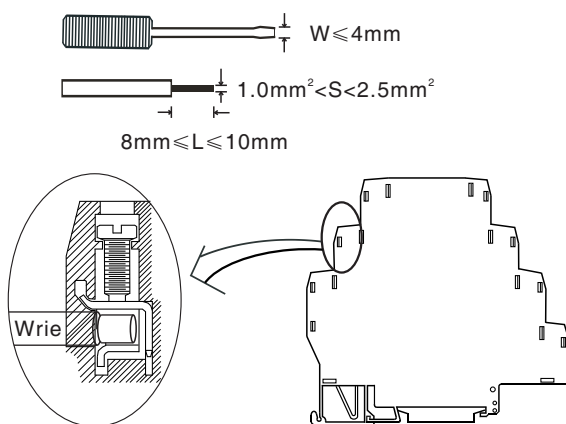


■ Connections

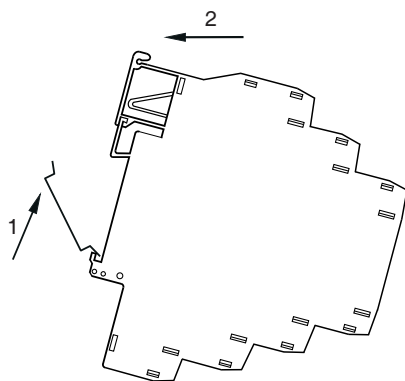
- (1).The SPDs adopt screw terminals;
- (2).The wires are single or multiple cables with a cross section area of $1.0\text{mm}^2 \sim 2.5\text{mm}^2$;
- (3).The length of bared wires is about 8mm,locked tightly by M3 bolt.



■ Installation

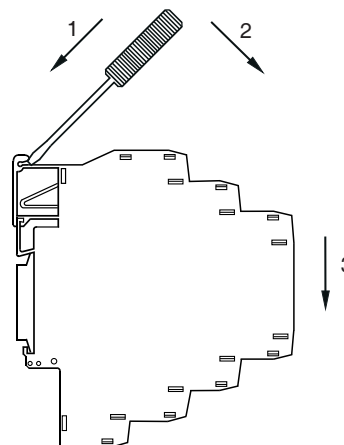
This SPD is designed for mounting on 35mm DIN guide rail.
Installation according with the following steps:

- (1).Make the upside of the SPD locked into the guide rail;
- (2).Push the downside of the SPD in the rail.



■ Disassembly

- (1).Insert a screwdriver (its edge length $\leq 6\text{mm}$) into the downside metal lock of the SPD;
- (2).Push the screwdriver upwards to open the metal clip;
- (3).Take the SPD out of the guide rail.



■ Maintenance

- (1).When using the SPD,you must have a reliable grounding.
- (2).Check again wiring and polarity are correct before SPD energizing.
- (3).The products were test strictly before leaving factory. If users find any abnormalities in the module, please contact the nearest agent or our company.
- (4).In 5 years from the delivery date, if the product works improperly during normal operation, we will repair or replace it without payment.

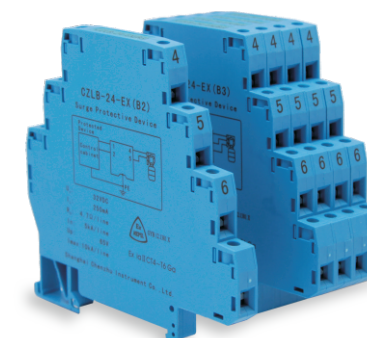
SHANGHAI CHENZHU INSTRUMENT CO.,LTD.

Add: Building 6, 201 Minyi Road, Caohejing Hi-Tech Park
Songjiang New Industrial Park, Shanghai 201612, P.R. China
Tel : +86-21-64513350 Fax : +86-21-64846984
Email : chenzhu@chenzhu-inst.com
<http://www.chenzhu-inst.com>



Surge Protective Devices

CZLB-EX series



⚠ Caution

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

■ Summarize

CZLB-EX series SPD is mainly used to protect the transmitters、 switches、 frequency signal、 communication equipments、 DC power supply,etc. Two-part design comprising a base part and a protection module.

Features:

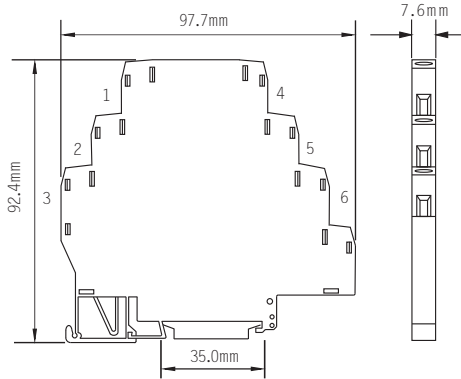
- (1).Easy replacement of protection modules.
- (2).Space-saving :case width of only 7.6mm.
- (3).Earthing via DIN Rail to simplify field wiring.

■ Specification

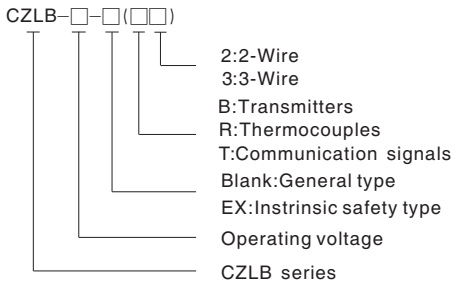
Type	CZLB-5-EX(T2) CZLB-5-EX(R3)	CZLB-24-EX(B2) CZLB-24-EX(B3)
Parameter		
Rated operating voltage Un	5VDC	24VDC
Max.operating voltage Uc	6VDC	32VDC
Leakage current	<3uA	<1uA
Protection level Up(line to line)	40V	60V
Protection level Up(line to ground)	600V	600V

Rated discharge current In:	5kA(8/20us)
Max. discharge current Imax:	10kA(8/20us)
Total discharge current Itotal:	20kA(8/20us)
Resistance per path:	1Ω / line
Voltage bandwidth (-0.5dB) :	10MHz
Max.operating current IL:	250mA
Response time:	<1ns
Ambient temperature:	-40℃ ~+85℃
Relative humidity:	10%~90%
Dimensions(L x W x H):	92.4mm×7.6mm×97.7mm
Connections:	Screw connection
Max.sectional area:	2.5mm²
Installation:	DIN 35mm
Test standards:	GB/T 18802.21 IEC 61643-21
Lightning protection performance test:	Shanghai lightning protection centre

■ Dimensions



■ Model designations



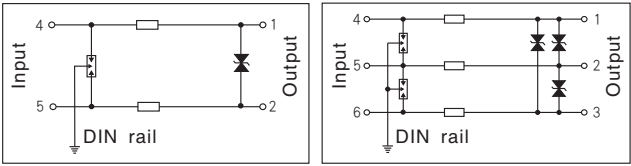
■ Safety certification

National Quality Supervision and Inspection Center for Products of Process Automation Instrumentation
Cerfication standards :
GB/T 20438.1(IEC 61508-1)
GB/T 20438.2(IEC 61508-2)
GB/T 18802.21(IEC 61643-21)
Functional safety level:SIL3

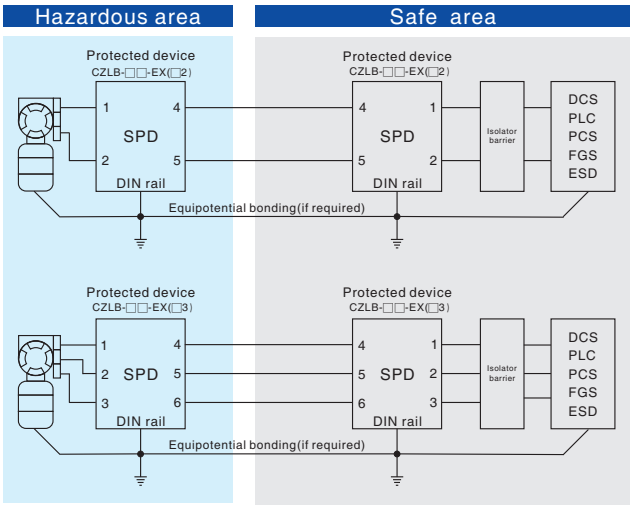
■ Explosion-proof parameters

National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation(NEPSI).
EX-standards:
Ex ia IIC T4~T6 Ga
Cerfication standards:
GB3836.1-2010(IEC 60079-0)
GB3836.4 -2010(IEC 60079-11)
Explosion-proof parameters: Ci≈0uF Li≈0mH
Ui=6V(CZLB-5-EX) GYB12. 1381X li=250mA
Ui=29V(CZLB-24-EX) GYB12. 1383X li=100mA
T4 Pi=1.3W(-40℃~+40℃)
Pi=1.0W(-40℃~+60℃)
T5 Pi=1.2W(-40℃~+60℃)
T6 Pi=1.0W(-40℃~+60℃)

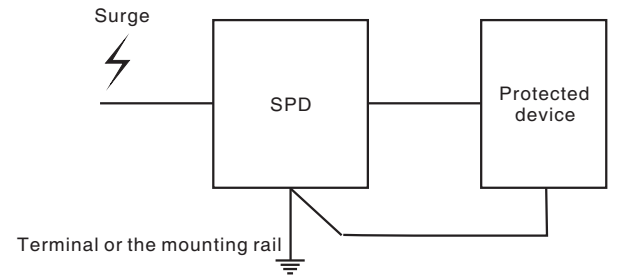
■ Function principle diagram



■ Typical application



■ Earthing system



Note:Put the line to connect SPD grounding and the protected equipment shell,then If the protected equipment without a grounding end, only make the surge protective devices connected to earth ground. The grounding wire should adopt the diameter of 2.5mm² cable.When you connected to grounding by terminal or the mounting rail,the grounding wire should adopt the diameter of 4~6mm² cable.