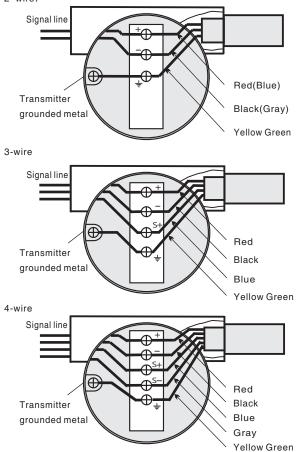


Note: Wire size 26/0.254 (1.32mm<sup>2</sup>, 16AWG), length 150mm.

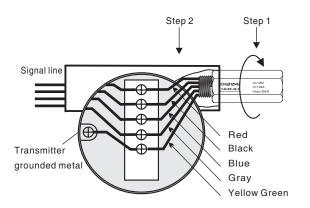
## Connections

Note: SPD must be reliably grounded. The wires between surge protective device and protected devices (including ground lines) should be as short as possible.

2-wire:



Installation



Installation steps:

Step 1  $_{\rm E}\,$  Put SPD wires/cables inside the protected device (through the thread connections) and then tighten the thread.

Step 2: Connect SPD wires/cables to the corresponding terminals.

# Surge Protective Device

CHENZHU User Manual

CZLBX-48 series



# Maintenance

(1). Check if the connections are correct and tight before powering on SPDs.

(2). SPDs' quality are well controlled and strictly inspected before delivery. If non-functional ones are found during operation, please contact us early enough.

(3). Within 5 years of delivery, any problems occurred during normal operations can get treatments free.

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

# **A** 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.

#### CZ.CZLBX-48(20kA).11(S)E-3.1/18.01

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### Summarize

CZLBX-48 series surge protective device is designed for protecting devices in the field from being damaged by surges and field instruments which is usually caused by lightning strikes.

(1).Conveniently installed on spare screwed holes of protected devices.(2).Paralleled with signal cables of protected devices.(3).Max. discharge current is 20kA.

(4).Protecting 2-wire, 3-wire, 4-wire field instruments.

### Specification

Rated operating voltage Un (DC):	24V			
Max. operating voltage Uc (DC) :	48V			
Rated discharge current In(8/20us):	10KA			
Max. discharge current Imax(8/20us):	20KA			
Protection level Up (8/20us, line to line):	85V			
Protection level Up (8/20us, line to ground): 600V				
Response time (line to line):	1ns			
Response time (line to ground):	100ns			
Bandwidth(-0.5dB):	2MHz			
Leakage current:	<2uA			
Temperature range:	-40°C∼+85°C			
Relative humidity:	5%~95%			
Material:	304 stainless steel			
Degree of protection:	IP65			
Test standards:	GB 18802.21			
	IEC 61643-21			
Lightning protection performance test:	Shanghai lightning protection			
	center			

# Ex mark: Ex ia IIC T4~T6 Ga

Ex d IIC T4~T6 Gb

China National Quality Supervision and Test Center for Explosion Protected electrical products

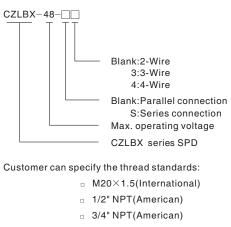
Certification standards: GB3836.1(IEC 60079-0)

GB3836.2(IEC 60079-1)

GB3836.4(IEC 60079-11) Ex parameters: (see the explosion-proof certification )

Туре	Ui(V)	li(mA)	Pi(W)	Ci(uF)	Li(mH)
CZLBX-48	50	32	0.4	0	0
CZLBX-48-3	50	16	0.2	0	0
CZLBX-48-4	50	32	0.4	0	0

# Model designations

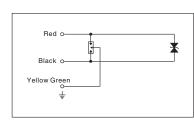


G1/2"(British)

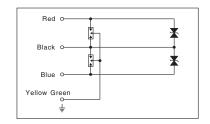
G3/4"(British)

# Function principle diagram

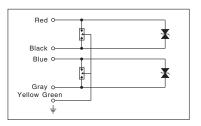
#### CZLBX-48



#### CZLBX-48-3

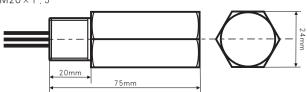


#### CZLBX-48-4



# Dimensions

M20×1.5



1/2"NPT G1/2"

#### Functional safety level:SIL3 National Quality Supervision and Inspection Center for Products of Process Automation Instrumentation

Lightning protection performance test Shanghai Lightning Protection Center

Test standards: GB/T 18802.21(IEC 61643-21)

Certificates

of Process Automation Instrumentation Test standards: GB/T 20438.1(IEC 61508-1) GB/T 20438.2(IEC 61508-2)

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