■ Connections
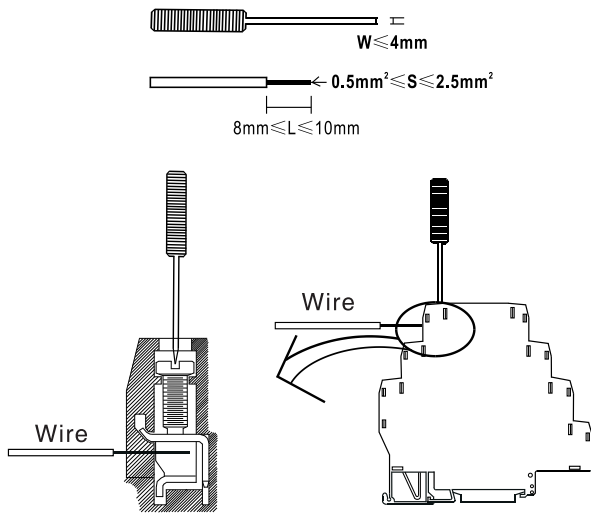
(1) The isolators adopt knock-down terminals.

(2) The wires are single or multiple cables with a cross- section of 0.5 mm^2~2.5mm^2.

(3) A length of 8mm bared wire is locked by the M3 bolt.As shown in figure.

W≤4mm

0.5mm^2≤S≤2.5mm^2

8mm≤L≤10mm

Wire

Wire

■ Installation

Mount the module on a 35mm DIN rail

(1) Make the upside of the isolator to the rail;

(2) Push the downside of the isolator towards the rail.

1

2
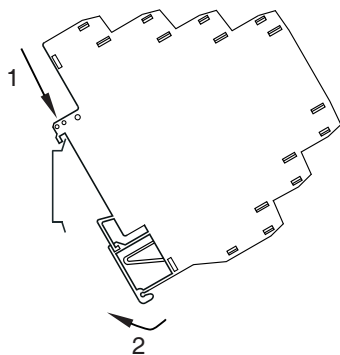
■ Disassembly

(1) Use a screwdriver (edge length≤6mm) insert the metal lock which at the downside of the isolator;

(2) Push the screwdriver upwards,and pull the metal lock downwards;

(3) Take out the isolator from the rail.

3

1

2
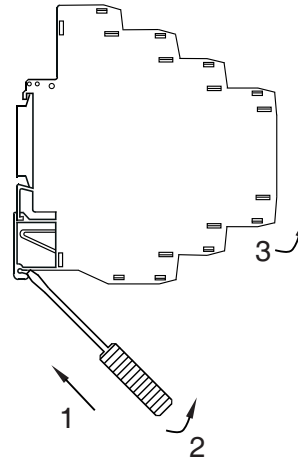
■ Maintenance

(1) Every product has been tested strictly before delivery.If users find any abnormality,please contact the nearest agent or our company.

(2) In 5 years from delivery date,if the product performs abnormally under normal use conditions,we will repair it for free.
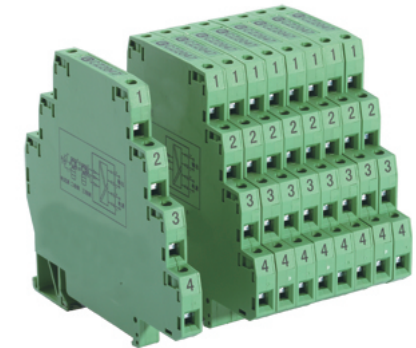
CHENZHU | **User Manual**

Isolator

CZ2071
CZ2171
CZ2271

5 年 质保

Please read the instruction manual carefully before use the product, and please safekeeping.

⚠ Caution

■ Please check whether the product type on the package accords to the ordering contract;

■ Read this manual carefully before installation or using. If there is anything unclear, please dial technic support hotline-400 881 0780;

■ Isolated barrier should be located in the safe area;

■ Supply voltage is 24VDC, 220VAC is forbidden;

CZ.CZ2271-EX.11(S)E-4.2/16.11

Summarize

Isolator converts a low-level signal from RTD and TC mounted into 0/4~20mA current or 0/1~5V voltage.The signal isolated and transferred through output side.It's an intelligent instrument with the function of auto cold-end-compensation. The scale division and range of RTD and TC are set through PC configuration aslo the upper/lower limit and current value of disconnection alarm setting. This product should be supplied power independently. Input circuit, output circuit and power supply are each galvanically isolated.

CZ2071 is RTD input,CZ2171 is TC input,CZ2271 is RTD and TC input.

Specification

Number of channel: 1
Supply voltage: 20~35V DC
Current consumption: (at 24V DC supply, 20mA signal output)≤35mA
Input: The input signal and range scope list

Signal type		Signal Range	Min. span	Accuracy
TC	T	−200℃～+400℃	50℃	1℃/0.2％
	E	−200℃～+900℃	50℃	1℃/0.2％
	J	−200℃～+1200℃	50℃	1℃/0.2％
	K	−200℃～+1372℃	50℃	1℃/0.2％
	N	−200℃～+1300℃	50℃	1℃/0.2％
	R	−40℃～+1768℃	500℃	3℃/0.2％
	S	−40℃～+1768℃	500℃	3℃/0.2％
	B	+320℃～+1820℃	500℃	3℃/0.2％
mV		−100mV～+100mV	10mV	40uV/0.2%
Pt100		−200℃~+850℃	20℃	0.4℃/0.2％
Cu50		−50℃~+150℃	20℃	0.4℃/0.2％
Cu100		−50℃~+150℃	20℃	0.4℃/0.2％

Note: 1.％ is related to the adjusted measurement range(the value to be applied is the greater).
2.3-wire heating resistor type, allowing a maximum conductor resistance 50Ω.
3.When TC signal input, the conversion accuracy does not include the cold junction compensation error, and the conductor resistance increasing per 100Ω,the cold junction compensation will add 0.2℃.
4.When B type TC signal input, the temperature range lower limit should be greater than 680℃.Then it can satisfy the precision index.

Output: Current: 0/4~20mA; Load resistance:RL≤300Ω
Voltage: 0/1~5V;　　Load resistance:RL≥2kΩ
(Note: output current: load resistance: RL≤550Ω,
Current consumption:≤50mA, need be customized)

Alarm indication:
Under lower limit,output current is around 3.8mA
Exceed upper limit,disconnection alarm,output current is around 20.8mA
Short circuit,output current is around 3mA
(Note: disconnection alarm current＜4mA or other special requirements, need to be customized)

Temperature drift: 0.01％F.S./℃
Cold junction compensation error: ±1℃；
　　　　　　　　　　　　　Intensive installation: ±3℃(−20℃~+60℃)
Response time: Reach 90％ of final value in 1s
Power supply protection:
Protect the barrier form reverse supply voltge destroy
Electromagnetic compatibility:According to GB/T 18268(IEC 61326-1)
Dielectric strength: 1500V AC;1minute(among power supply, input and output)
Insulation resistance:
≥100MΩ;500V DC(among power supply, input, output and the shell)
Weight: Approx.45g
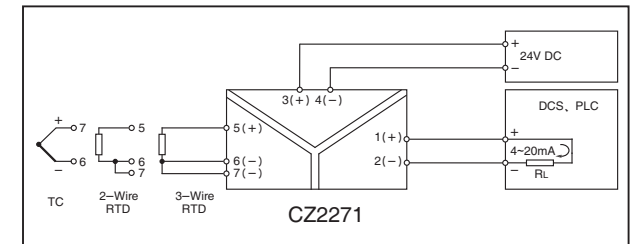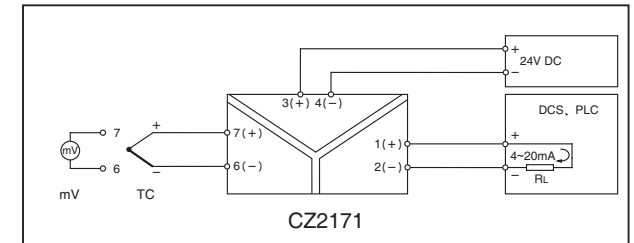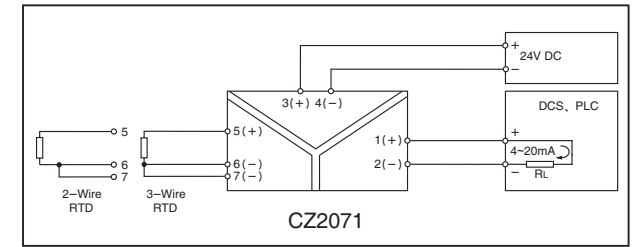Suitable is apparatus: 2-wire RTD、3-wire RTD 、TC

Operation Conditions

(1) The air should not contain any medium corrupting the coat of chrome, nickel and silver. Moreover,violent quiver and impact or any cause of electromagnetic induction (such as big current or spark, etc.)must be avoided when using.
(2) Operating temperature: -20℃~+60℃
(3) Storage temperature: -40℃~+80℃
(4) Relative humidity: 10%~90%

Outline dimensions
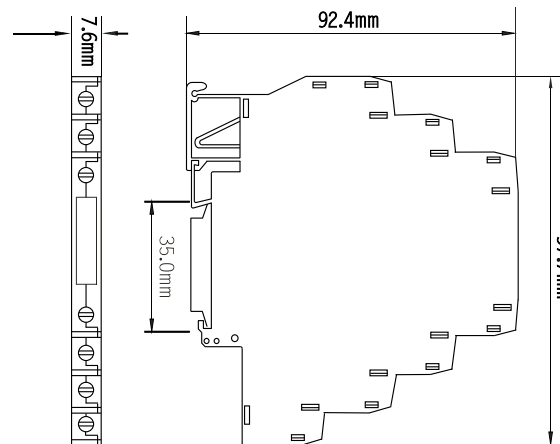
92.4mm×97.7mm×7.6mm

Application

CZ2071

CZ2171

CZ2271

Note:1.3-wire inputs, as far as possible to ensure equal three wire resistance value.
2.terminals 6 and 7 must be connected when 2-wire inputs.

Configuration software EasyConfig

EasyConfig is configuration software. Based on the Windows operating system, the software is easy to use for its friendly interface and the use of USB interface. The parameters such as the sensor type and range scope could be set in by users the software.
Version of operating system: Windows XP and above version
Hardware interface: USB interface
Dedicated adapter: USBCOM-MINI(dedicated USB to RS-232 serial connection)