■ Connections

(1).The isolators adopt screw terminals.

(2).The wires are single or multiple cables with a cross section area of $0.5mm^2 \sim 2.5mm^2$.

(3).The length of bared wires is about 8mm,locked tightly by M3 bolt.

$W \leqslant 4mm$

$0.5mm^2 \leqslant S \leqslant 2.5mm^2$

$8mm^2 \leqslant L \leqslant 10mm^2$

Wire

Wire

■ Installation

Isolator is designed for mounting on 35mm DIN guide rail.

(1).Make the upside of the isolator locked into the guide rail;

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

1

2

■ Disassembly

(1).Insert a screwdriver (its edge length≤6mm)into the downside metal lock of the isolator;

(2).Push the screwdriver upwards,then prize the metal lock downwards;

(3).Take the isolator out of the guide rail.

3

1

2
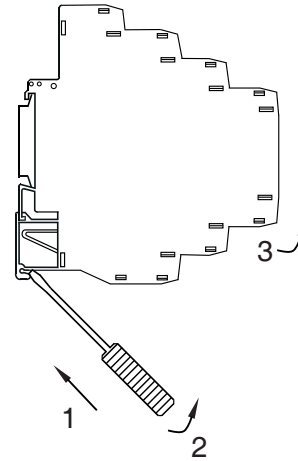
■ Maintenance

(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.
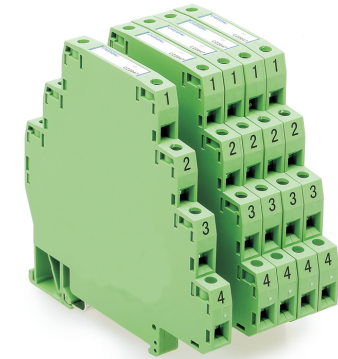
CHENZHU | User Manual

Isolator

CZ2077
CZ2177
CZ2277

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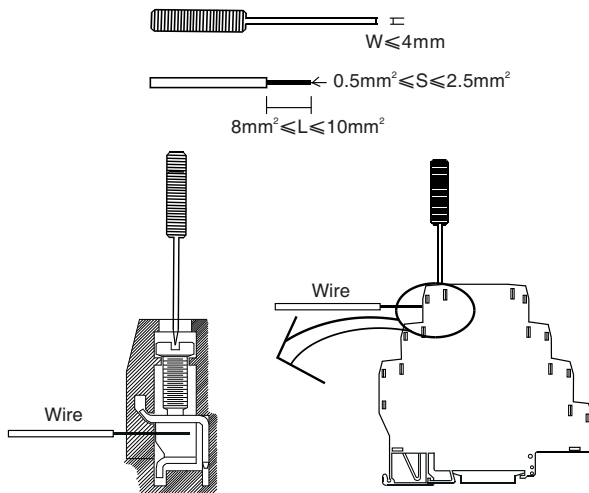
⚠ Caution

■ 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;

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

■ Users are not allowed to dismantle or repair the barrier otherwise it will induce malfunction.
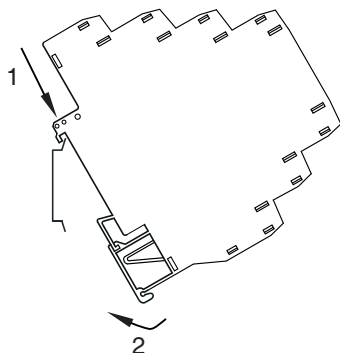
CZ.CZ2277.11(S)E-4.1/16.11

Summarize

Loop-powered isolator, converts thermal resistance, thermal couple, and mV signal field into 4~20mA current for driving load. It has sensor breakage alarm indicator function. TC input has cold junction compensation function. It is intelligent, indexing number of TC and range can be configured through computer.

CZ2077: RTD input; CZ2177: TC input; CZ2277: RTD, TC input

Specification

Number of channel: 1
Supply voltage: 9~30V DC
Input: "Input signal and range list"

Type		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%
RTD	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."%" of output accuracy is relative to the setting range, should take a bigger of relative error and absolute error as the output accuracy in application.
2. RTD input, allow max wire resistance 50Ω(3-wire)；
3. TC input, transfer accuracy not contain cold junction compensation error;Every increase in compensation wire 100Ω, cold end error increases 0.2 ℃；
4. RTD type B input, the lower limits of temperature range must be greater than 680℃, to meet the accuracy specifications.
5. mV signal has to be customized.

Output: Current: 0/4~20mA; Load resistance: RL≤(Ue−9)/0.021
Alarm indication:
Lower limit overflow alarm, output current ≈3.8mA；
Upper limit overflow and breakage alarm, output current ≈20.8mA
(Notes: breakage alarm current＜4mA or other special requirements, be customized)
Temperature drift: 0.01%F.S./℃
Cold junction compensation: ±1℃(Compensation range: −20℃~+60℃)
Intensive installation: ±3℃
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-/3-wire thermal resistance, thermal couple and mV signal

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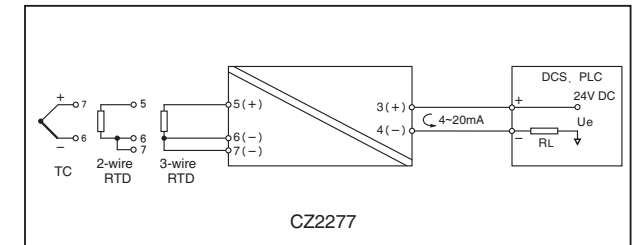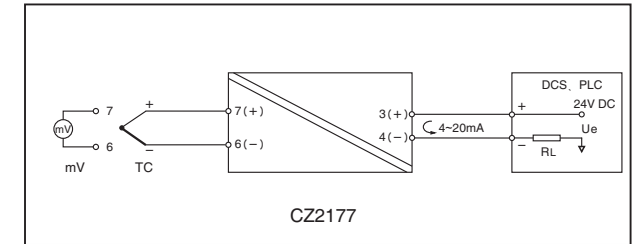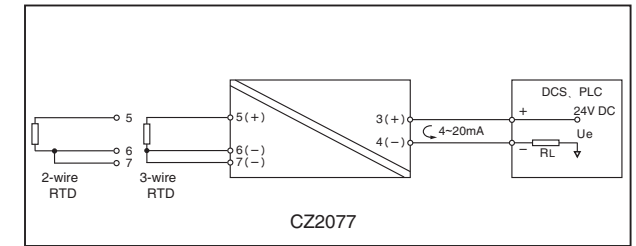
(1). The air should not contain any medium corrupting the coat of chrome,nickel and silver.Moreover,violent quiver and impact or any cause of electromagnetic induction (such as big current or spark,etc.)must be avoided when using.
(2). Operating temperature: -20℃~+60℃
(3). Storage temperature: -40℃~+80℃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

Outline dimensions

92.4mm×97.7mm×7.6mm

Application

CZ2077

CZ2177

CZ2277

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