

Isolator

CZ3072



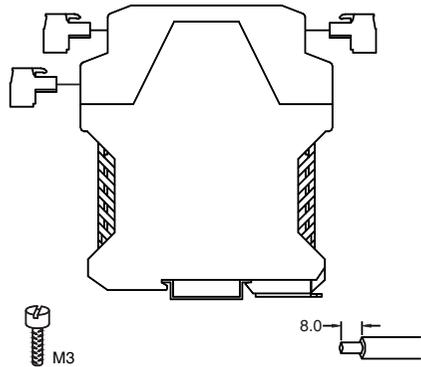
Please read the instruction manual carefully before use the product, and please safekeeping.

⚠ 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 something 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.

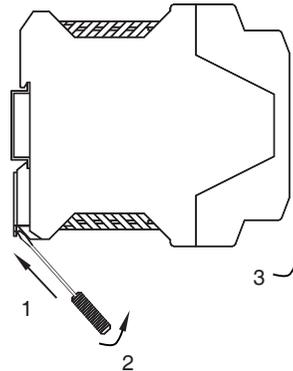
■ Connections

- (1) The isolators adopt knock-down terminals.
- (2) The wires are single or multiple cables with cross-section of 0.5 mm²~2.5mm²
- (3) A length of 8mm bared wire is locked by the M3 bolt. As shown in figure.



■ Disassembly

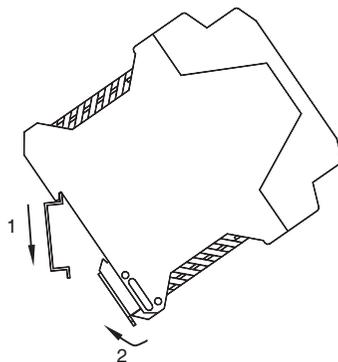
- (1) Use a screwdriver (edge length≤6mm) insert the metal lock which at the downside of the isolator;
- (2) Push the screwdriver upwards, and pull the metal lock downwards;
- (3) Take out the isolator from the rail.



■ 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.



■ 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.



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>

■ Summarize

Thermocouple input isolator, transfers TC, mV signal into 0/4~20mA or 0/1~5V and output isolatedly. It has automatic cold junction compensation function. It is intelligent and could be configured with parameters such as the graduation of thermocouple and the scope of range through computer. This product should be supplied power independently. Input circuit, output circuit and power supply are each galvanically isolated.

■ Specification

Number of channels: 1

Supply voltage: 20~35V DC

Current consumption: (at 24V DC supply, 20mA output) \leq 35mA

Input: See "input signal and range scope list" as below

Signal Type	Signal Range	Min. Span	Accuracy
TC	T	-200°C ~ +400°C	50°C 0.5°C/0.1%
	E	-200°C ~ +900°C	50°C 0.5°C/0.1%
	J	-200°C ~ +1200°C	50°C 0.5°C/0.1%
	K	-200°C ~ +1372°C	50°C 0.5°C/0.1%
	N	-200°C ~ +1300°C	50°C 0.5°C/0.1%
	R	-40°C ~ +1768°C	500°C 1.5°C/0.1%
	S	-40°C ~ +1768°C	500°C 1.5°C/0.1%
	B	+320°C ~ +1820°C	500°C 1.5°C/0.1%
mV	-100mV ~ +100mV	10mV	20μV/0.1%

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.TC input, transfer accuracy not contain cold junction compensation error; Every increase in compensation wire 100Ω, cold end error increases 0.2 °C

3.TC type B input, the lower limits of temperature range must be greater than 680°C, to meet the accuracy specifications.

4. mV signal has to be customized.

Output: Current: 0/4~20mA; Load resistance: $R_L \leq 300\Omega$

Voltage: 0/1~5V; Load resistance: $R_L \geq 20k\Omega$

(Note: output current: load resistance: $R_L \leq 550\Omega$, Current consumption: $\leq 50mA$, need be customized)

Alarm indication:

Lower than range, LED L flashing, output current $\approx 3.8mA$

Higher than range, LED H flashing, output current $\approx 20.8mA$

Breakage, both L and H are flashing, output current $\approx 20.8mA$

(Note: breakage alarm current $< 4mA$ or other special requirements, need to be customized)

Temperature drift: 0.01%F.S./°C

Cold junction compensation error : $\pm 1^\circ C$ (-20°C~+60°C)

Response time: Reach 90% of final value in 1s

Power supply protection:

Protect the product from reverse supply voltage destroy

Electromagnetic compatibility: According to IEC 61326-1(GB/T 18268)

Dielectric strength:

1500V AC; 1minute(among power supply, input and output)

Insulation resistance:

$\geq 100M\Omega$; 500V DC(among power supply, input, output and the shell)

Weight: Approx.100g

Suitable IS apparatus: TC and mV signal sensor

■ Operation Conditions

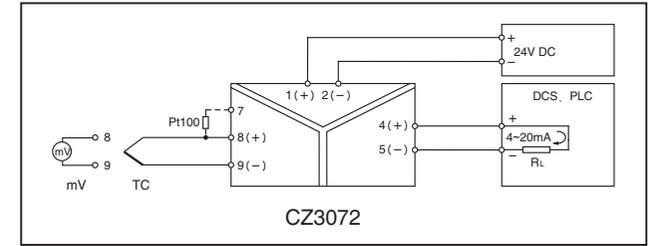
(1).The air should not contain any medium corrupting the coat of chrome, nickel and silver. Moreover,violent quiver and impact or any cause of electromagnetic induction (such as big current or spark, etc.)must be avoided when using.

(2). Operating temperature: -20°C~+60°C

(3). Storage temperature: -40°C~+80°C

(4). Relative humidity: 10%~90%

■ Application



■ 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)

■ Dimensions

114.5mm×99.0mm×17.5mm

