

XP Series Thermocouple Isolated Transmitter Data Sheet

1. General

XP Series Thermocouple Isolated Transmitter (one input one output, one input two outputs) receives thermocouple signal from the industrial field, isolates, and converts into a standard process signal that have a linear relationship with the temperature. It is widely used in data acquisition, signal transmission and conversion, PLC, DCS and other industrial measurement and control systems in the fields of machinery, electricity, telecommunications, petroleum, chemical industry, steel, sewage treatment, building construction, etc. It is used to perfect and supplement the function of the system I/O plug-in, improve the anti-interference ability of the automatic control system, and ensure the stability and reliability of the system.



2. Features

- ◆ Input, output and power are completely isolated, with strong anti-interference ability
- ◆ High accuracy, high linearity, long - term running stability
- ◆ Modular design, small size, low power consumption, suitable for intensive installation
- ◆ Plug-in construction, easy installation, disassembly and maintenance

3. Specifications

Power supply: DC24V±10%, AC220V

Power consumption: ≤2.2W

Input: K, S, E, B, R, T, J, N etc.

Cold junction compensation: internal (NTC)
0~50℃, error < 1℃

Output: DC voltage, DC current

Load resistance: voltage output ≥10KΩ
current output ≤350Ω

Accuracy: ±0.2%F.S (ΔR>10mV)
±0.4%F.S (10mV≥ΔR>5mV)

Temp. coefficient: ≤±100PPM/℃

Insulation resistance: ≥100MΩ/500VDC

Dielectric strength: input/output ≥2000VAC (1min)

input/power ≥2000VAC (1min)

output/power ≥1000VAC (1min)

Operating temperature: 0~50℃

Storage temperature: -40~85℃

Operating humidity: 10~90%RH

Atmospheric pressure: 86~106kPa

Installation: DIN 35mm rail

Dimension: 122mm×18mm×96mm

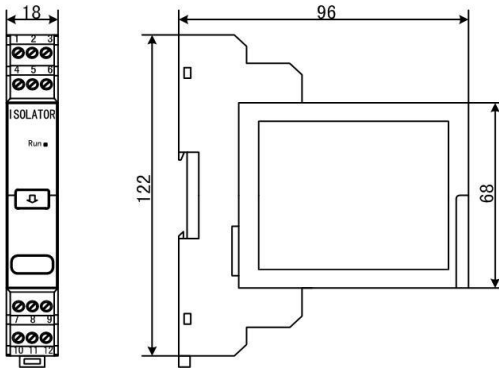
4. Ordering Information

XP series code table :

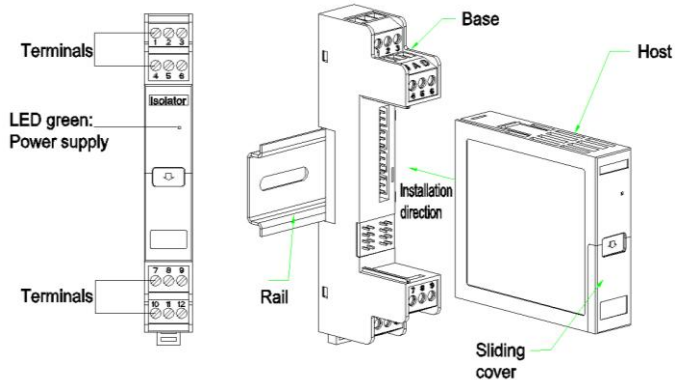
XP	Input type		Temperature range		Output 1		Output 2		Power supply	
	Code	Thermocouple	Code	Rang	Code	Rang	Code	Rang	Code	Rang
↓ Thermocouple Isolated Transmitter	K	K-type	A	0-100℃	A420	4-20mADC	A420	4-20mADC	A	AC220V
	S	S-type	B	0-200℃	A020	0-20mADC	A020	0-20mADC	D	DC24V
	E	E-type	D	0-800℃	A010	0-10mADC	A010	0-10mADC	Y	Option
	B	B-type	E	0-1000℃	V010	0-10VDC	V010	0-10VDC		Output Loop
	R	R-type	F	0-1300℃	V15	1-5VDC	V15	1-5VDC		
	T	T-type	G	0-1600℃	V05	0-5VDC	V05	0-5VDC		
	J	J-type	Y	Option	K	K-type	Y	Option		
	N	N-type			L420	2-wire 4-20mA		None		
	Y	Option			Y	Option				

5. Dimension & Installation

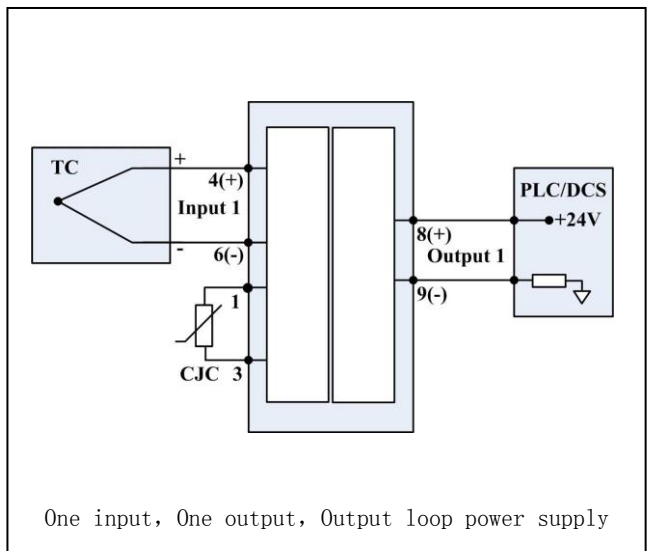
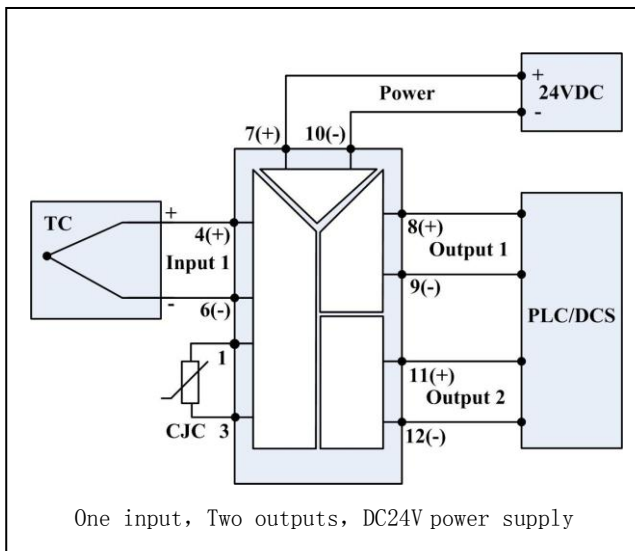
Dimension (122mm×18mm×96mm)



Installation



6. Typical Connection



Note: The connection diagrams given in this manual are typical. When installing, please refer to the connection diagram on the product.

7. Examples of ordering

Refer to the code table above and provide the model number correctly.

Example 1 input: K-type thermocouple, 0~800℃, output: one channel 4-20mA, power supply: 24VDC

order model: XP-K-D-A420-D

Example 2 input: S-type thermocouple, 0~1300℃, output: two channels 4-20mA, power supply: 24VDC

order model: XP-S-F-A420-A420-D (abbreviated as: XP-S-F-2A420-D)

Example 3 input: E-type thermocouple, 0~700℃, output: one channel 2-wire 4-20mA, power supply: output loop

order model: XP-E-Y-L420 (Y=0-700℃)



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