AI SERIES MULTI–CHANNEL PID TEMPERATUE CONTROLLER

PRODUCT INTRODUCTION

AI series multi-channel PID temperature controller supports thermocouple or two-wire Pt100 input, SSR voltage drive output or L3 relay contact output. Each channel supports different input signal, and is used independently or cooperating with PLC or touch screen system. Products are designed for 10-year life at least and 3-year free warranty, realizing same accuracy and anti-interference ability as single channel temperate controller.

FUNCTIONS AND FEATURES

- Supports 2 or 4 programmable inputs channels, with K, S, E, J, B, N, T, WRe5-WRe2 multiple specifications thermocouple input, automatic cold compensation or two-wire Pt100 input.
- Using high performance component greatly reduces temperature drift and the mutual interference among channels; AI-70482 supports 4 completely isolated channels measurement, suitable for thermocouple which negative electrode is connected to outer shell.
- Has input digital correction, and each channel has digital filtering and the strength of filtering can be adjusted independently or canceled.
- SSR voltage drive output with control cycle adjustable of 0.48~5 seconds.
- Advanced AI control with auto-turning and self-learning, achieving stable and precise control.
- Power consumption is about 75% lower than with 4 units single channel temperate controller.

AI–7048

- 4-channel PID temperature controller
- 0.2%FS measuring accuracy
- AIBUS communication protocol

AI–70482

- Input signal isolated based on AI-7048
- suitable for thermocouple which negative electrode is connected to outer shell

AI–7028

- 2-channel PID temperature controller
- 0.2%FS measuring accuracy
- AIBUS communication protocol

MODEL SELECTION AND SPECIFICATIONS

AI–	□	□	□	□	□	□	□	□	□	Specifications
Model	7028									2-channel PID temperature controller
	7048									4-channel PID temperature controller
	70482									4-channel PID temperature controller(input signal isolated)
Panel size		A								96*96*100mm
		B								160*80*100mm
		C								80*160*100mm
		E								48*96*100mm
		E5								48*96*100mm, DIN rail mounted type
		F								96*48*100mm
Input1, 2 (IN1,IN2)			J1							2 channels thermocouple or mV signal input
			J2							2 channels 2-wire RTD input
			J3							2 channels voltage input, 0~3V, 0~5V, 1~5V and etc
			J4							2 channels current input, 0~10mA, 4~20mA, 0~20mA and etc
			J5							2 channels transmitter input, with 24VDC feed supply
Input3, 4 (IN3,IN4)				J1						2 channels thermocouple or mV signal input
				J2						2 channels 2-wire RTD input
				J3						2 channels voltage input, 0~3V, 0~5V, 1~5V and etc
				J4						2 channels current input, 0~10mA, 4~20mA, 0~20mA and etc
				J5						2 channels transmitter input, with 24VDC feed supply
OUTPUT1,2(OP1,OP2)					G5					dual SRR output
OUTPUT3,4(OP3,OP4)						G5				dual SRR output
Alarm (ALM)							L0			large volume relay contact output (250VAC/2A) (Chinese brand)
							L3			dual channel N/O relay contact output (250VAC/2A) (Chinese brand)
Communication (COMM)								S		RS485 communication interface (occupy internal power supply)
								S4		RS485 communication interface (with isolated power supply)

ATTENTION:

1.Input specification for AI-70482 can only be thermocouple and there's no alarm relay output.

2.E5 panel has communication module S as default.

MODEL SELECTION

AI-7048AJ2J2G5G5L3S

AI-7028E5J1G5L0S

AI-70482EG5G5S

WIRING DIAGRAM