

FEATURES

- **Resistance Temperature Detector Module Offered**
- **Current and Voltage Input Module Offered**
- **Provides Wide Input Range**
- **Up to 6 Analog Input Modules in One PLC-K5 System**
- **12-bit Conversion for High-Resolution Measurement**
- **Very Reliable $\pm 0.3\%$ Error**



DESCRIPTION

The KNC-PLC-K531 Analog Input Expansion Modules are offered for current and voltage inputs or Resistance Temperature Detector (RTD) sensor inputs. The KNC-PLC-K531-04RD is an RTD module that accepts the following sensor types: Pt100, Pt1000, Cu50, and Cu100. The KNC-PLC-K531-04IV performs a 12-bit conversion on the inputs for high-resolution measurement and can be configured to read voltages or currents of different ranges. The KNC-PLC-K531-04IV can accept a current range 0-20 mA or 4-20 mA, and a voltage range of 1-5 Vdc or 0-10 Vdc. The KNC-PLC-K531 series has an accuracy of $\pm 0.3\%$ ensuring a precise reading. These modules are attached to the KNC-PLC-K5 CPU series to provide analog input capabilities. Up to 6 of the analog input modules can be attached to the KNC-PLC-K5 CPUs, allowing for a maximum of 24 analog inputs or 28 analog inputs if using the KNC-PLC-K506EA-30AT.

SPECIFICATIONS

Parameter	KNC-PLC-K531-04IV	KNC-PLC-K531-04RD
Input Points	4	4
Input Signal	Current or Voltage	Pt100, Cu50, Pt1000, Cu100 are Selectable, 2-Wire or 3-Wire
Measurement Accuracy	$\pm 0.3\%$ F.S.	$\pm 0.3^\circ\text{C}$, Resolution 0.1°C
Measurement Range	4-20 mA, 0-20 mA, 1-5 Vdc, 0-10 Vdc	Pt100: $-200\sim 850^\circ\text{C}$, Cu50: $-50\sim 150^\circ\text{C}$, Pt1000: $-50\sim 300^\circ\text{C}$
Parameter Configuration	Each Channel Can be Configured Separately by Kincobuilder Software	
Signal Limitation	Input Current < 24 mA Input Voltage < 12 Vdc	----
Error Indication	Red LED for Each Channel Indicates Excessive Measurement Range	
Module Width	50 mm	

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KNC-PLC-K531 - Analog Input Expansion Modules



EXPANSION

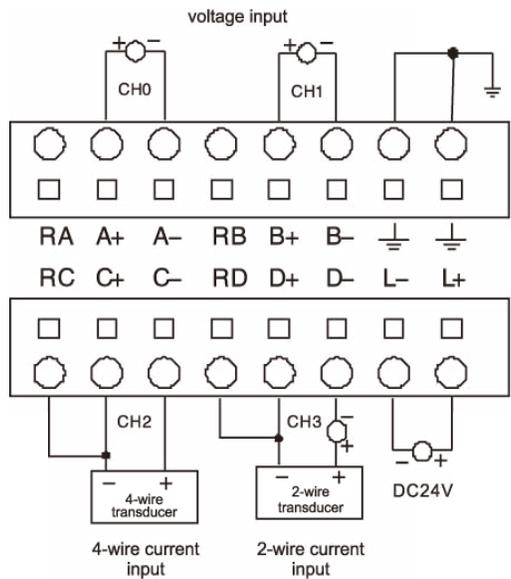


In each system, the CPU module is arranged in the leftmost end, and expansion modules are connected to the expansion interface on the right.

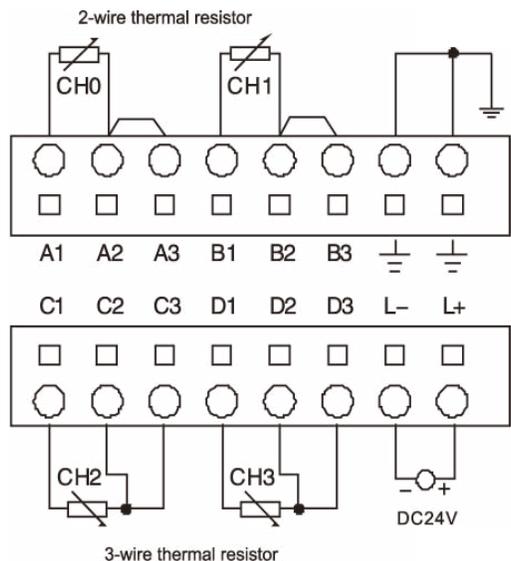
A cable slot is designed on the left side of each expansion module. The expansion cable can be put in the cable slot to ensure seamless interconnection between modules after installing.

WIRING DIAGRAMS

KNC-PLC-K531-04IV



KNC-PLC-K531-04RD



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