

- **Four High-Speed Counters**
- **3 Pulse Train Outputs / Pulse Width Modulation**
- **Transistor Output**
- **20 Modes and Inputs of High-Speed Counters**
- **Multiple Communication Ports: 1 Micro USB, 2 RS485**
- **Rated Input Voltage DC 24V**
- **8 Direct Input, 8 Direct Output, and 6 Direct Input/Output**



The PLC-K205E series provides special I/O functions, a Micro USB (USB 2.0) programming port, 4 high-speed counters, 3 high-speed pulse outputs, two RS485 communication ports, integrated digital input and output channels, and more. The high speed counters come in 10 different operation modes, support a single-phase frequency up to 50 KHz, and a dual-phase (A/B phase) frequency up to 50 KHz. In the 10 different modes, each counter has its own inputs for clock, direction control, start and reset, and has a 32-bit present value. The built-in high-speed pulse outputs can reach a maximum frequency of 50 KHz, and support PWM. The free KincoBuilder software provides absolute and relative positioning, homing, jogging, and quick stop instructions. The PLC-K205 series is an ideal hub for data processing with field devices, such as temperature modules, servo drives, field busses and more.

### High Speed Counters

The K2 provides 4 high speed counters of HSC0 to HSC3. High speed counter supports multiple modes: single phase, CW/CCW (Up/Down), AB phase (1 multiplication and 4 multiplication). HSC0 and HSC1 can support up to 50KHz (include single phase and AB phase). HSC2 and HSC3 can support up to 20KHz for single phase and 10 KHz for AB phase.

### High-Speed Pulse Outputs

The K2 PLC series provides 3 high speed pulse outputs (Q0.0, Q0.1, and Q0.4). All support PTO and PWM. The Q0.0 and Q0.1 support up to 50KHz, Q0.4 supports up to 10KHz. For the relay output model of the CPU module does not support high speed pulse output.

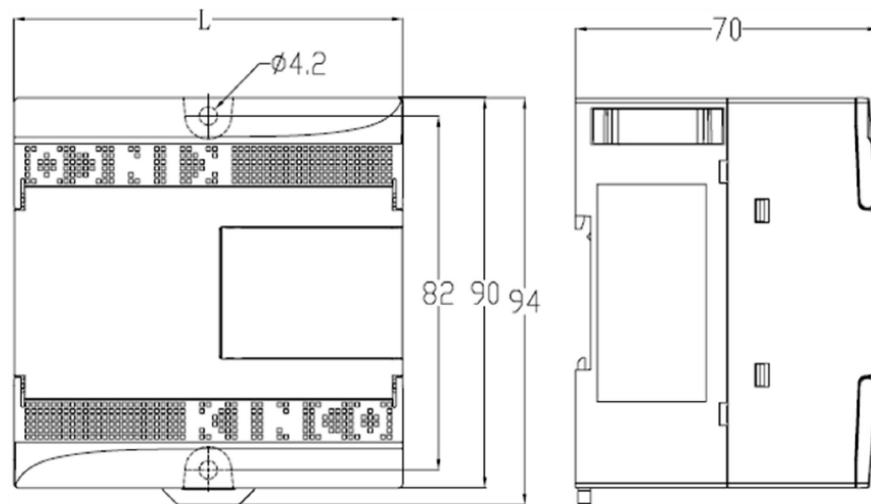
### Serial Communication

The K5 PLCs provide 3 serial communication ports; Port 0 is strictly a RS232 port, Ports 1 & 2 are strictly RS485 ports. The K5 PLCs can be networked as slaves with other manufacturers HMIs or other master station devices using the Modbus RTU or ASCII protocols. The K5 PLCs can also work as a master to connect with other PLCs, inverters, instrumentation, actuators, and so on. Each RS485 port supports up to 32 interconnected devices on a single network.

### Interrupts

The K2's I0.0 and I0.3 in CPU support edge interrupt function, it can execute interrupt by rising edge and falling edge of the input signal. By using this function, it can capture the rising edge and falling edge of input signal quickly. For some input signal whose pulse width is less than the CPU scan time, it can respond quickly.

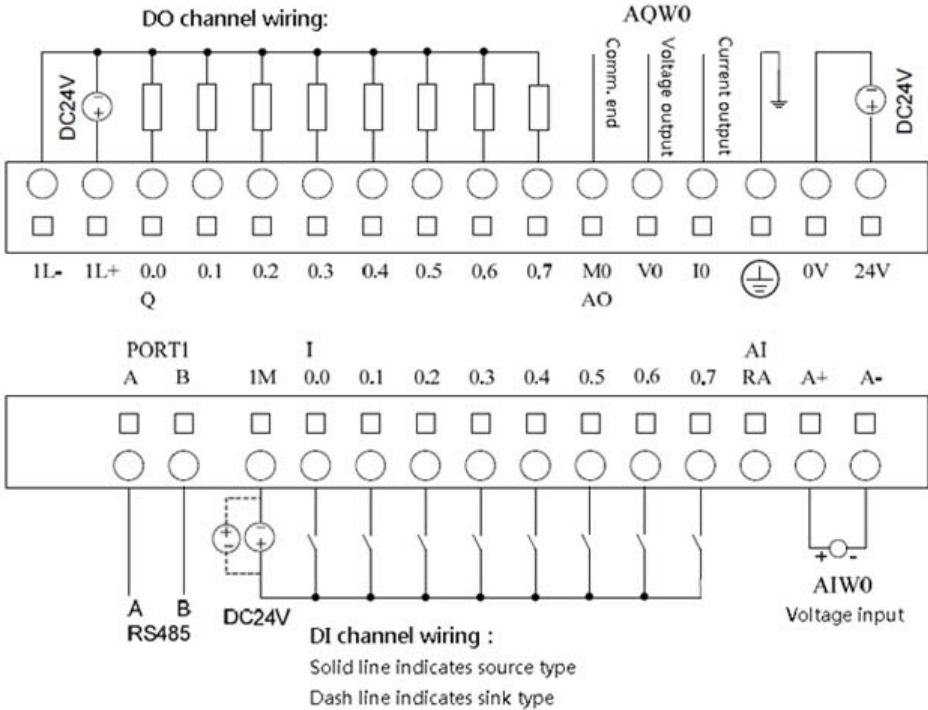
Discrete Inputs	
Input Points	8
Input Type	Sourcing or Sinking
Input Voltage	Rated 24 VDC; Maximum: 30 VDC
Rated Input Current	3.5 mA @ 24 VDC
Minimum Input Voltage of Logic "1"	Normal Channel: 11 VDC @ 2.0 mA
Maximum Input Voltage of Logic "0"	5 VDC @ 0.7 mA
Input Delay <ul style="list-style-type: none"> <li>• Off-to-On</li> <li>• On-to-Off</li> </ul>	Common Channel 15 $\mu$ s; High-Speed Channel 10 $\mu$ s Common Channel 60 $\mu$ s; High-Speed Channel 6 $\mu$ s
Isolation Between Input and Internal Circuit <ul style="list-style-type: none"> <li>• Mode</li> <li>• Voltage</li> </ul>	Opto-Electrical Isolation 500 Vac / 1 minute
Signal Identification	Separate LED Indicators for each Channel
Module Width	70mm



CPU205 L=90mm

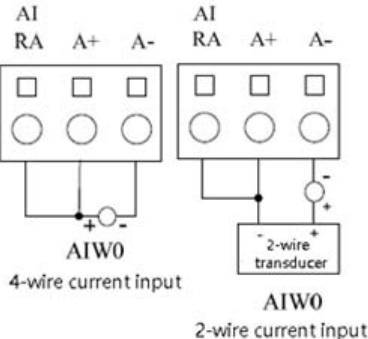
## PLC-K205E Series

### KNC-PLC-K205EA-18DT



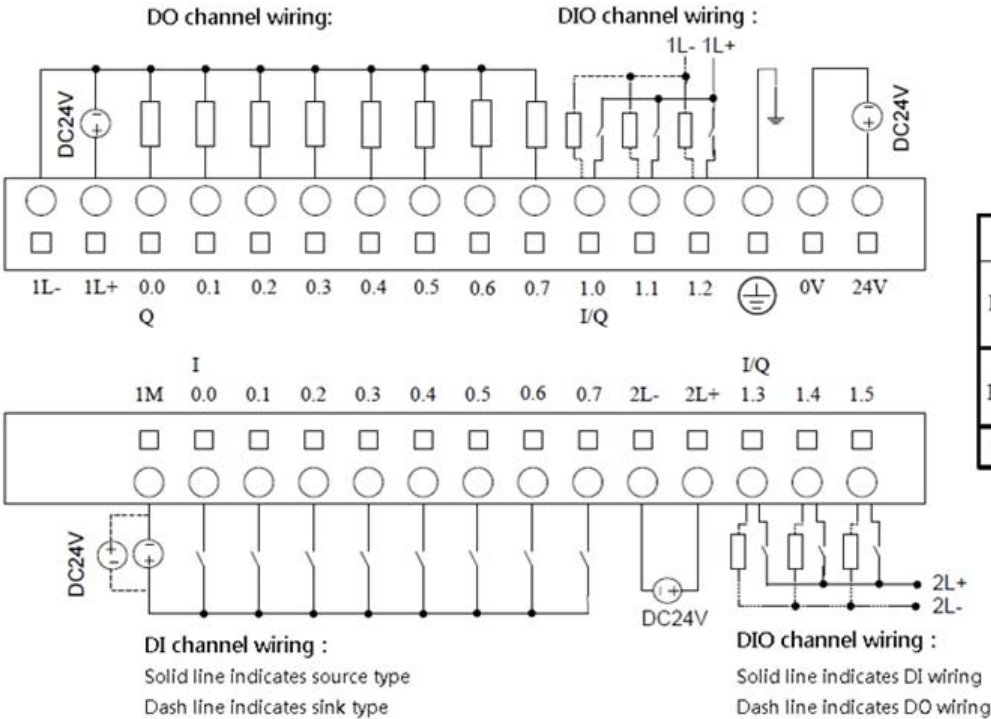
#### RS485 (RJ45)

	PIN	Define	Spec.
PORT2	1	A	RS485 +
	2	B	RS485 -
Comm.	8	GND	GND



WIRING DIAGRAM

### KNC-PLC-K205EX-22DT



#### RS485 (RJ45)

	PIN	Define	Spec.
PORT1	1	A	RS485 +
	2	B	RS485 -
PORT2	6	A	RS485 +
	7	B	RS485 -
Comm.	8	GND	GND