

FEATURES

- **EtherCAT Bus Coupler**
- **2 RJ45**
- **24 VDC +/-20%**
- **EtherCAT In & EtherCAT Out**
- **Supports 16 Expansion Modules**

DESCRIPTION



The RP20C-ECT is a coupler module with EtherCAT protocol. The RP20 series products, with their robust industrial design and manufacturing quality, outstanding performance, and comprehensive feature integration, are not only widely applicable in the field of general industrial automation but also highly suitable for various specialized smart sectors such as building automation, agricultural intelligence, energy monitoring, and energy management. They are designed to offer customers versatile and flexible solution possibilities.

SPECIFICATIONS

Parameter	RP20C-ECT
Supply Power Rated Voltage	24VDC +/-20%
Rated Power	2.5W(CPU Unit Only) / 20W(Full-Load)
Rated Output Voltage of K-Bus	5VDC (4.75VDC~5.25VDC)
Rated Output Current of K-Bus	2.0A (Typical Value@5V)
Power Output Derating	At 55°C, the Output is Derated by 80% (output current should not exceed 2A).
Power Protection	Overcurrent Protection Reverse Polarity Protection Surge Absorption
Bus Protocol	EtherCAT
Bus Interfaces	2 x RJ45
EtherCAT Bus Communication Rate	100Mbps
Maximum Distance Between Stations	100m
K-Bus Communication Rate	100Mbps
Refresh Mode	DC-Sync Mode: Minimum Sync-Time Time at 1ms FreeRun Mode SM-Sync Mode
Indicators	PWR: Power Supply
	RUN: Operating Status of the Expansion Bus
	ERR: Error Status of the EtherCAT Bus
	SF: Error Status of the Expansion Bus
Expansion Capacity	Supports Connection of up to 16 RP20 Expansion Modules
Dimensions (W x H x D)	24.3mm x 100mm x 80mm
Weight	120g
The K-Bus refers to the Expansion Bus Protocol for the KNC-PLC-RP20 Modules.	

L012042

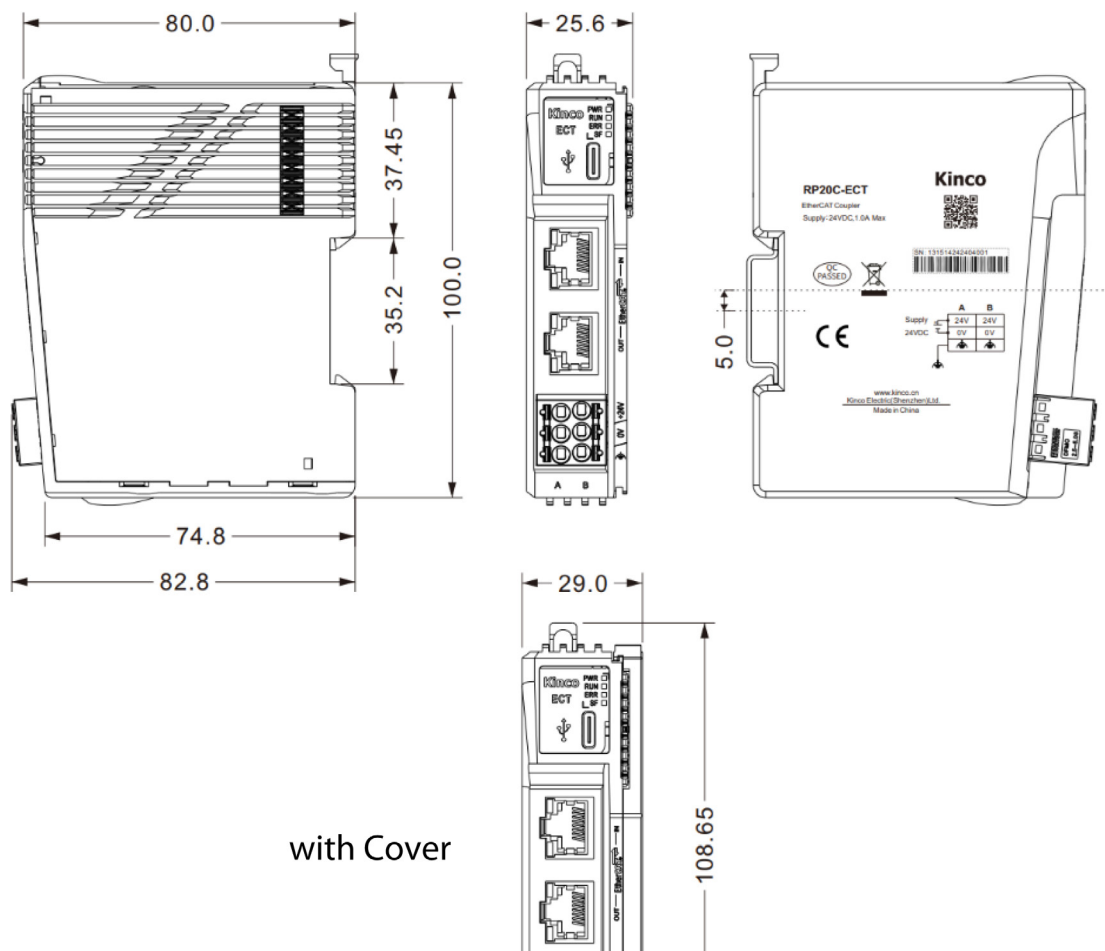
Operating Environment		
Climatic Conditions	Ambient Temperature	-40°C~+70°C
	Relative Humidity	10%~95%, No Condensation
	Atmospheric Pressure	Equivalent to 0-3000 Meters Above Sea Level
Mechanical Conditions	Free Fall	With Transport Packaging, Allows 5 Drops from 1m Height to the Cement Floor
Operating Conditions		
Climatic Conditions	Ambient Temperature	Open Device with Natural Ventilation, Ambient Temperature Range: -20°C~55°C
	Relative Humidity	10%~95%, No Condensation
	Atmospheric Pressure	Altitude ≤ 2000 Meters
	Pollution Level	Suitable for Pollution Level 2
Mechanical Conditions	Sine Vibration	5 < f, 8.4 Hz, Random: 3.5mm Displacement; Continuous: 1.75mm Displacement
		8.4 < f < 150 Hz, Random: 1.0g Acceleration; Continuous: 0.5g Acceleration
	Shock	Half Sine Wave, 15g, 11ms, 6 Times Per Axis
Electromagnetic Compatibility	EMC Immunity Level	Zone B, IEC61131-2
	Electrostatic Discharge	Air Discharge 8kV, Contact Discharge 4kV
		Performance Level A
	Surge	DC Power Supply 0.5kV CM, 0.5kV DM
		I/O and Communication Ports: 1kV CM
		Performance Level A
	Fast Transient Burst	Power Coupling: 2kV, 5kHz.I/O and Communication Coupling: 1kV, 5kHz
		Performance Level A
Protection Level		IP20
Cooling Type		Natural Air Cooling
Installation Type		DIN35 Rail Mounting
Certification		CE(ENIEC61000-6-2:2019)

L012042

RP20C Couplers

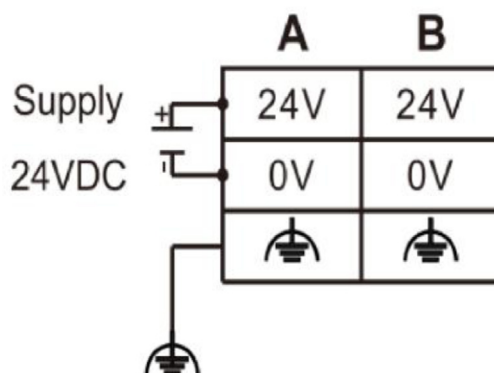
Kinco

DIMENSIONS



with Cover

WIRING DIAGRAMS



Pin (RJ45)	Core Coloring	Signal	Description
1	Yellow	TD +	Transmission Data +
2	Orange	TD -	Transmission Data -
3	White	RD +	Receiver Data +
6	Blue	RD -	Receiver Data -

L012042