SC-JC06 EtherCAT Switch

Instruction

Manual

Ver 1.1

SC-IOECT-JC001

EtherCAT-коммутатор (разветвитель)

Оглавление

EtherCAT-коммутатор (разветвитель)

1. Product Features

1. 10M/100M rate adaptation, avoiding jamming and delay, and good adaptability;

2. 4 or 6 EtherCAT network ports, RJ45 interface, cascade function;

3. Imported industrial grade chip, anti-static 2KV;

4. Iron shell, good heat dissipation performance, anti electromagnetic interference;

5. Supports hot plugging of network cables, with a self-healing time of 200ms;

6. 18~28VDC wide voltage power supply, anti reverse connection, anti 2500V surge voltage;

7. Operating temperature range: - 10 ℃~55 ℃;

8. Working humidity: 5%~90% (no condensation);

9. Volume: 30 * 102 * 96mm;

10. Support DN45 rail installation or screw fixation installation.

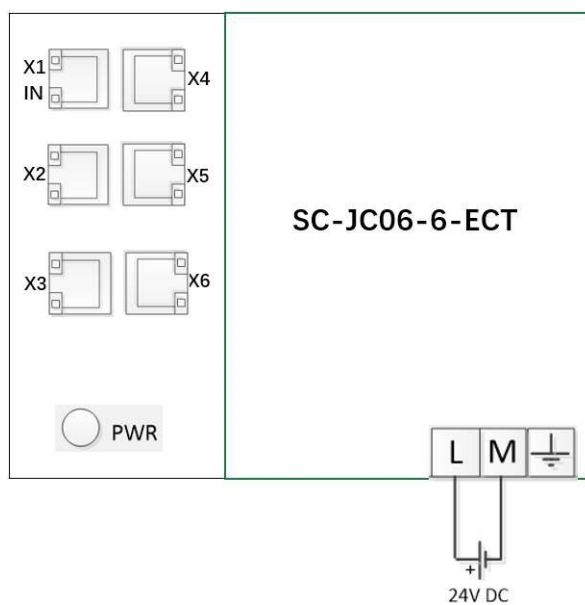EtherCAT-коммутатор (разветвитель)

2. technical parameter

model	SC-JC06 EtherCAT switch	
Product	Industrial grade EtherCAT switch	
technical specifications		
Product order	SC-JC06-4-ECT	SC-JC06-6-ECT
Port Description	4 RJ45 ports	6 RJ45 ports
Network	EtherCAT	
RJ45 port	10/100BaseT (X) automatic detection	
Twisted pair	10BASE-T: Cat3,4,5 UTP(≤100 m)	
	100BASE-TX: Cat5 or later UTP(≤50 m)	
Switch Properties	Packet cache: 512 kbit MAC	
Protection	IP40	
LED indicators	Power indicator: PWR; Interface indicator: Network	
Power Supply	Input voltage: DC18~28V Access terminal: Phoenix terminal supports built-in overcurrent 4.0A	
Other specifications		
work environment	Working temperature: - 10~55 ° C Storage temperature: - 40~85 ° C Relative humidity: 5%~90% (no	
Industry standards	EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A EMS: IEC (EN) 61000-4-2 (ESD): ± 8kV contact discharge, ± 15kV air discharge IEC (EN) 61000-4-3 (RS): 10V/m (80-1000MHz) IEC (EN) 61000-4-4 (EFT): power line: ± 2kV; Data line: ±	
mechanical properties	Shell: metal material, electrostatic black spray	
	DIN clamp rail type, wall mounted	
	Weight: 0.15 Kg	
	Dimensions: 30 x 96 x 102 mm (W x D x H)	
Standards and	Standard industrial grade	
Mean time	100000 hours	
Warranty	18 months	

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3. Interface diagram

The X1 network interface is fixed for connecting to the EtherCAT master station, and the remaining network interfaces are connected to the EtherCAT slave station;

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4. Communication example 1

Note: This example uses the SC-JC06-6-ECT module as an example to introduce the use of the JC06 EtherCAT switch. The SC-JC06-6-ECT module can be used with reference to this example.

4.1 Hardware conditions

1. SC-JC06-6-ECT switch
2. Omron controller (this example uses NX1P2-9024DT)
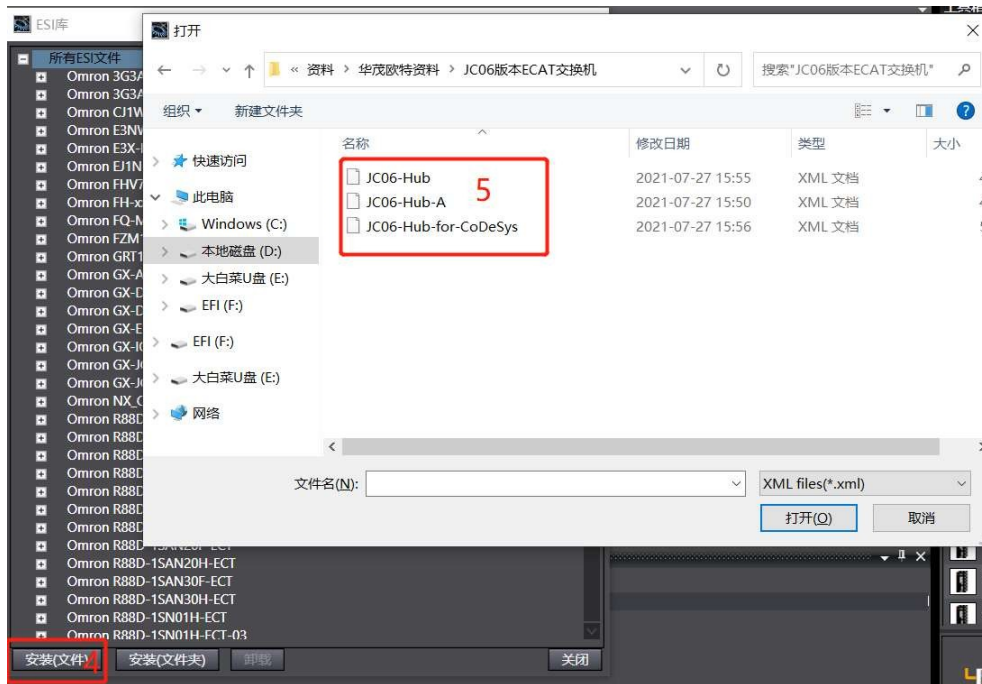3. PC (with network card driver) network cable

4.2 Software Requirements

Sysmac Studio (This example uses Sysmac Studio V1.46)
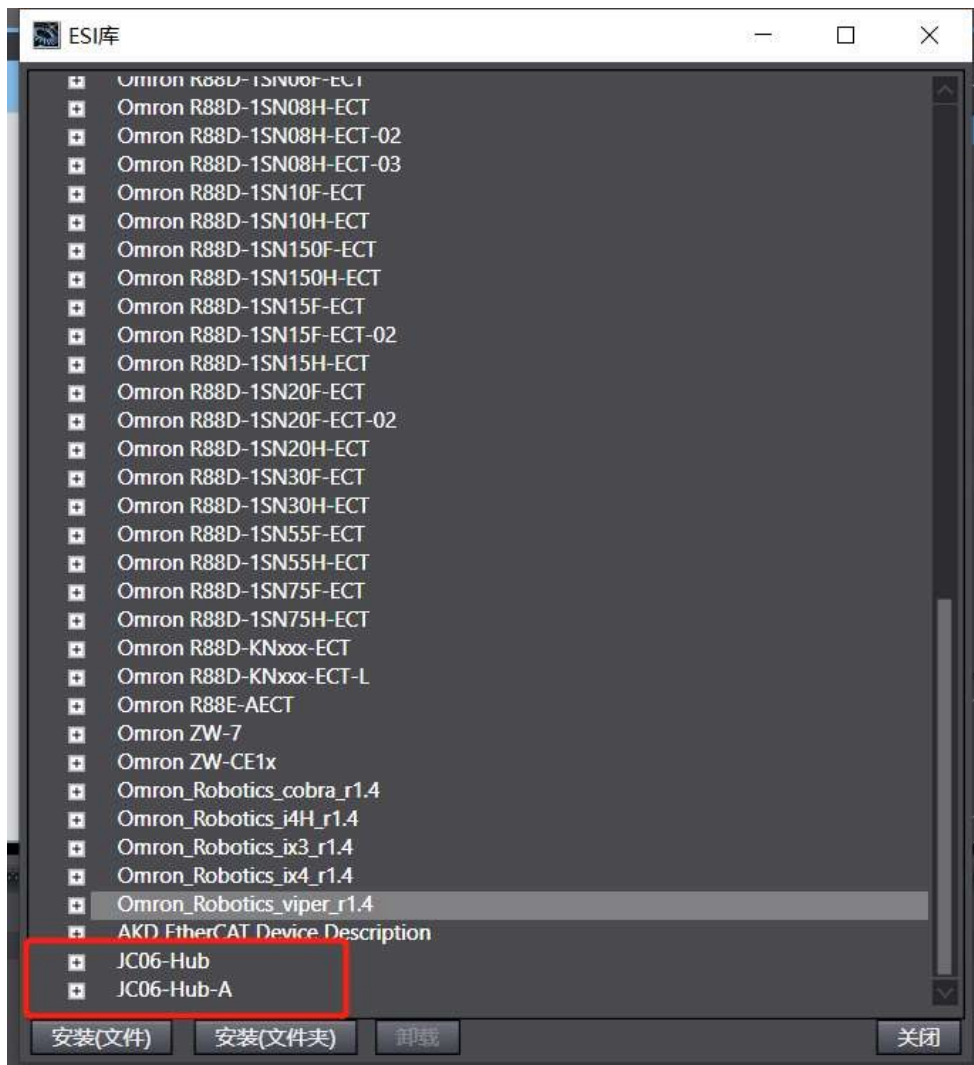
4.3 Operating Steps

4.3.1 Install XML file

Open the Sysmac Studio software and add an XML file after creating a new project:
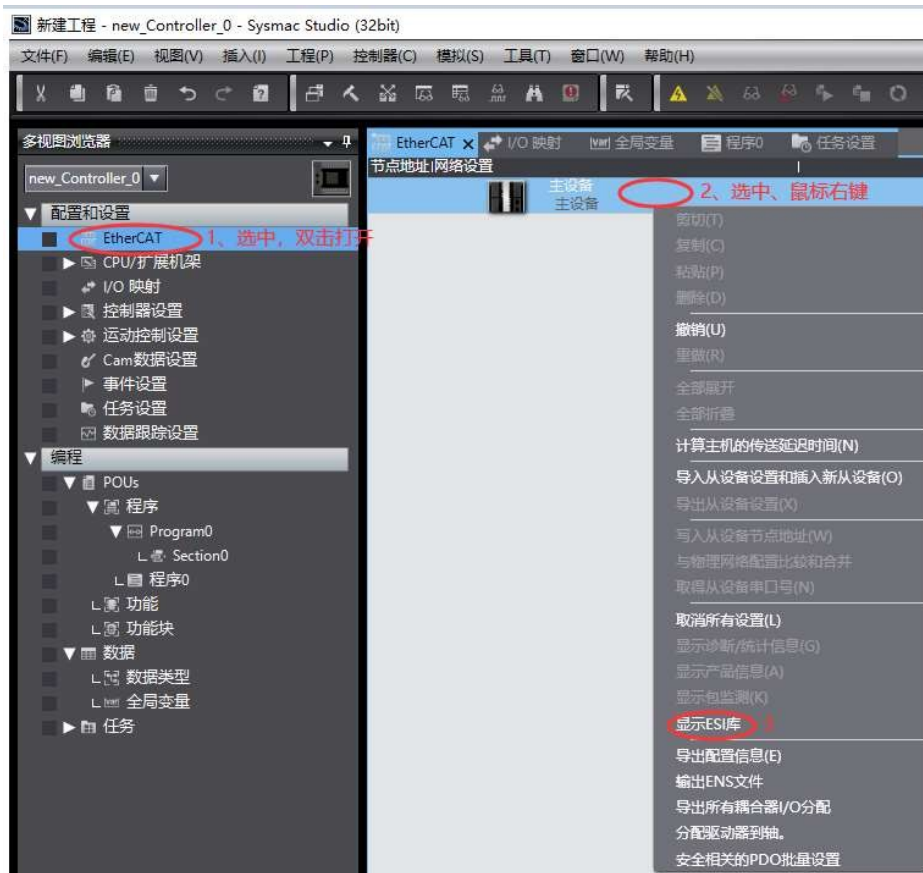
After the XML file is successfully installed, the ESI library displays as follows:

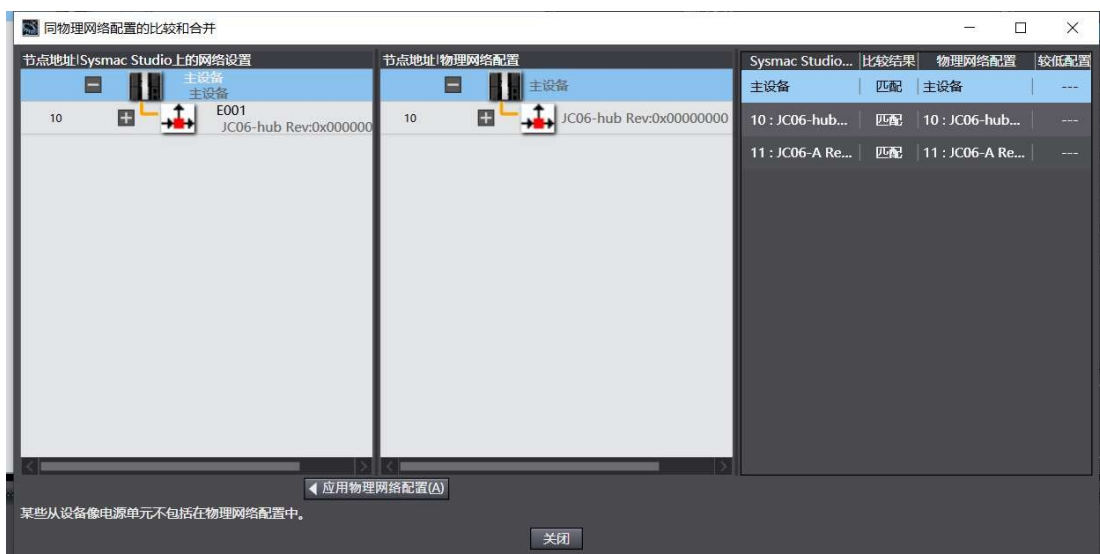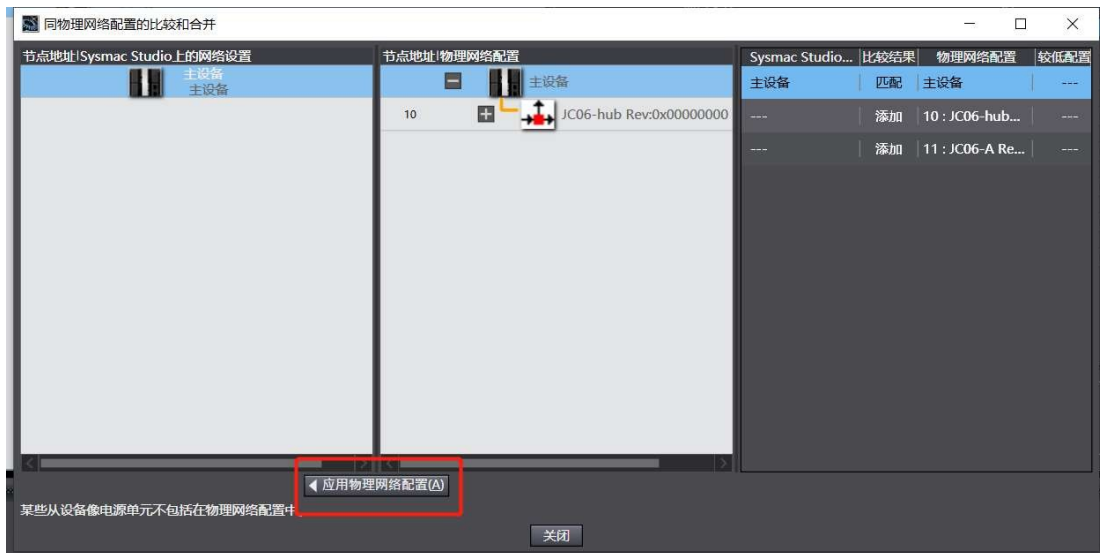EtherCAT-коммутатор (разветвитель)

4.3.2 Add JC06-ECT (Automatic Scan Method)

1. Connect the X1 network port of JC06-ECT to the EtherCAT network port of Omron controller, connect the X2 network port to the network port (IN)of Omron ECC201, and connect the X3 network port to the network port of Omron 1S servo driver

(IN), the PC connects to the Ethernet/IP network port of the Omron controller, and the controller is connected online:
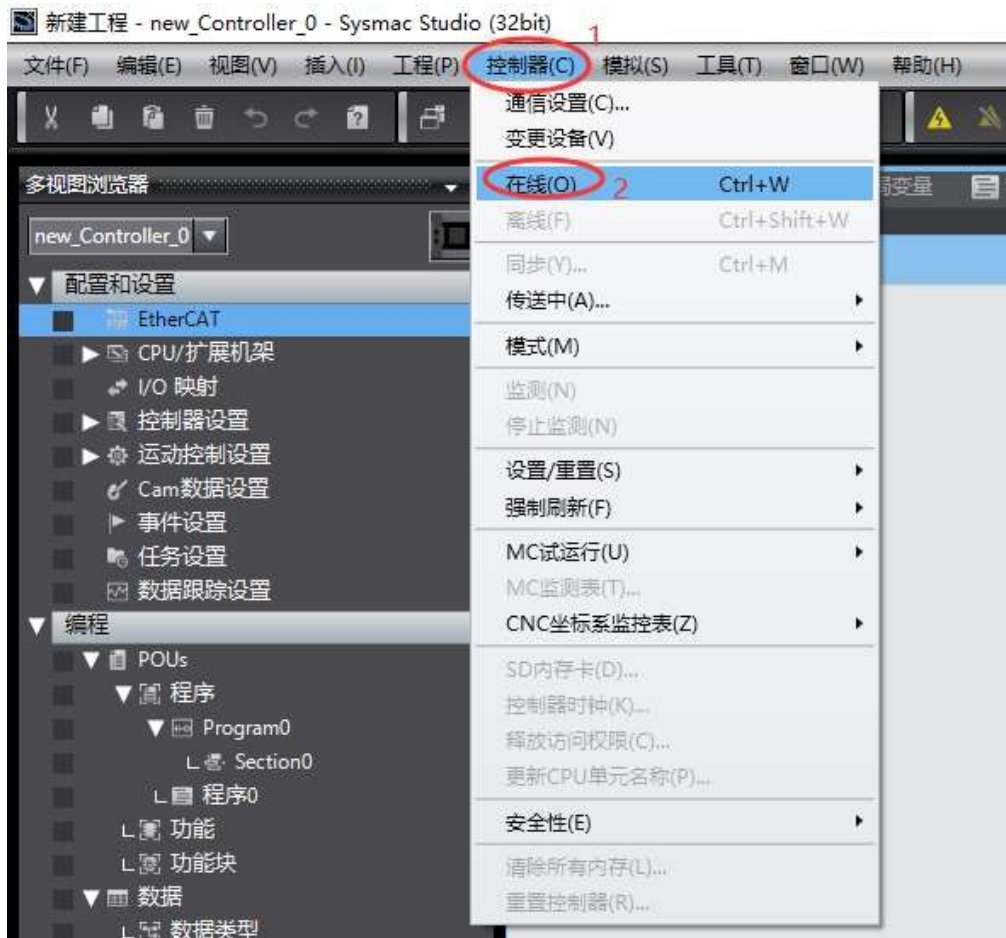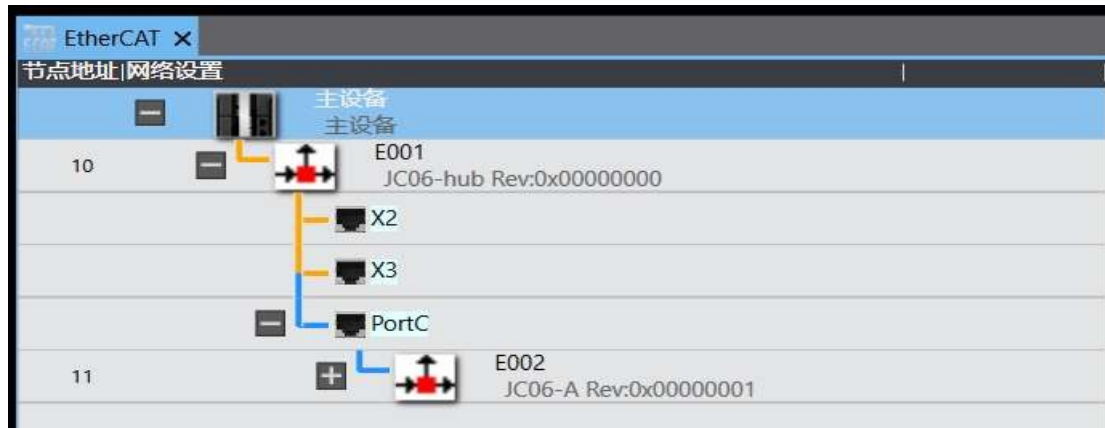

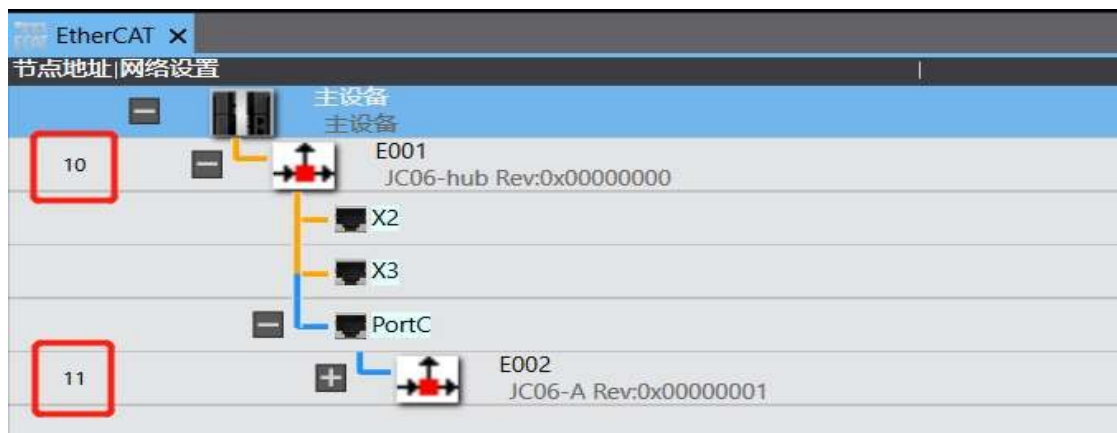After the controller status changes to online, add t h e   JC06-ECT module by scanning:

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4.3.3 Add JC06-ECT (manual add method)

After installing the XML file, locate the following devices in the "Toolbox" of the Sysmac Studio software:

First add "JC06-hub Rev", then add "JC06-A Rev":

Configure the "Node Address" of JC06-ECT:

Add a module to the corresponding network interface, configure the "node address", and then download it to the controller:
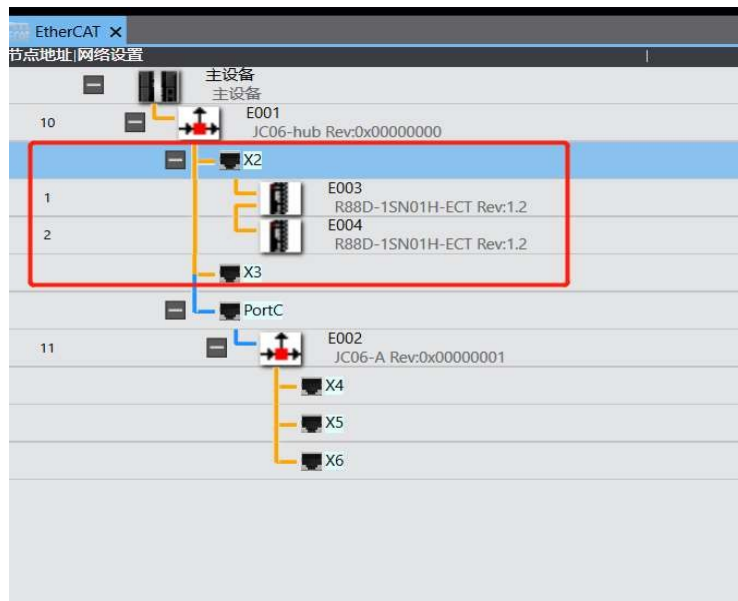
Note: Please refer to the above connection with Omron for the matching and usage of other brands of PLC and JC06.