OMRON

EtherCAT junction slaves

GX-JC03/JC06

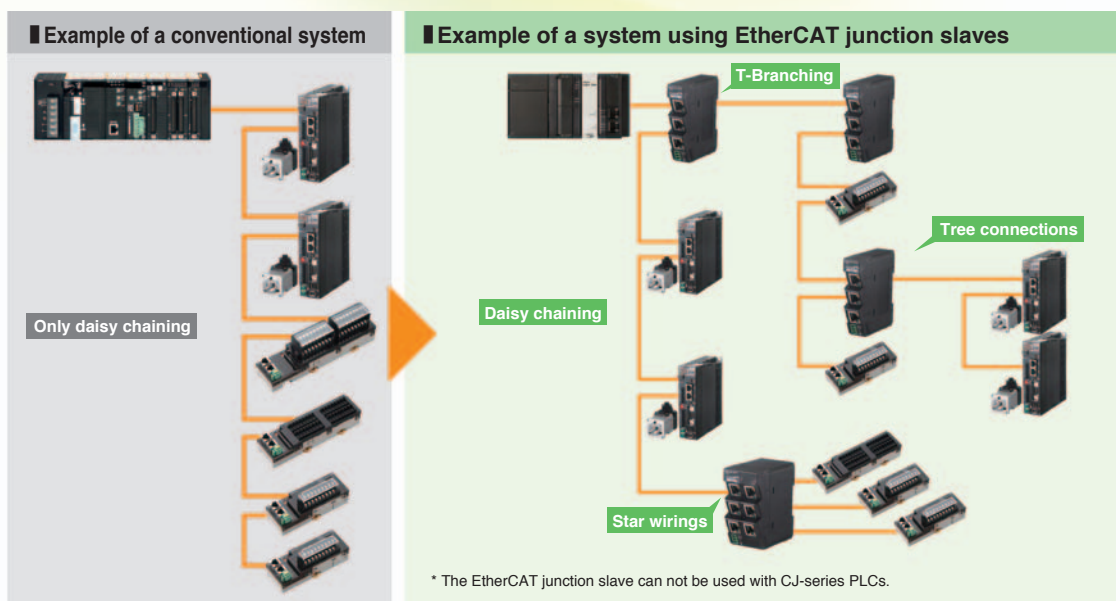## For branching on EtherCAT networks
Effective wirings by combining daisy chaining and branching connections

EtherCAT®

Daisy chaining, star wiring, and tree connections can be made in one network.
Efficiency in assembling and wirings will be improved, shortening the time required to start the system operation.

System configuration

▮ Example of a conventional system

Only daisy chaining

▮ Example of a system using EtherCAT junction slaves

T-Branching

Tree connections

Daisy chaining

Star wirings

* The EtherCAT junction slave can not be used with CJ-series PLCs.

sysmac
always in control

■Advantages of EtherCAT junction slaves

Support for efficient equipment and system building

In a system that consists of plural processes, debugging work can be started with a process for which designing work has been completed.

Improves system's operating rate

It is possible to design the system operation, considering errors such as EtherCAT slave failure and disconnection of communications cables. A part of the system can be separately operated, and the system can be promptly restored.

EtherCAT daisy chaining connection

The system can not start operation before installing and assembling all devices of all processes. (Neither Process B nor Process B can start operation before Process A has been built.)

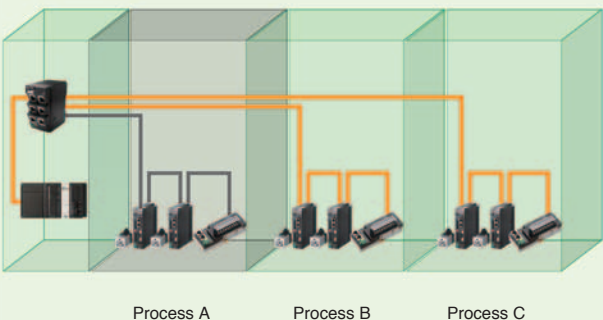Process A   Process B   Process C
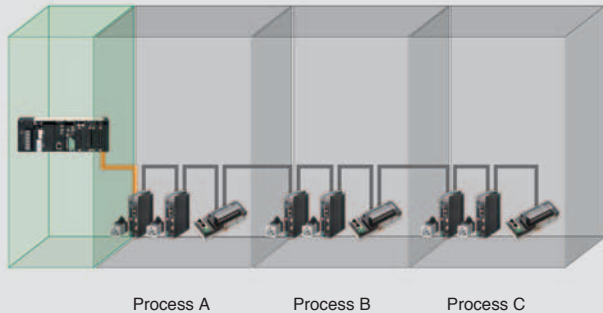
EtherCAT daisy chaining connection

If an error occurs on a slave, or the network cable is disconnected, slaves following on the same network can not communicate with the master unit. The operating rate of the system can be lowered, or maintenance work will be less efficient.

Process A
Process B
Process C
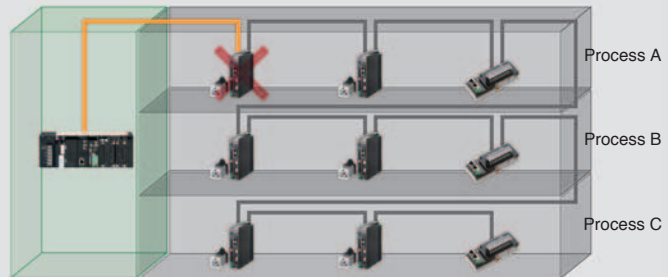
EtherCAT branching connection

The slaves connected via EtherCAT junction slaves on Process B and Process C can operate, even though slaves for Process A do not operate. Debugging work of the processes can be made separately, thus improving debugging work efficiency.

Process A   Process B   Process C

EtherCAT branching connection

With EtherCAT junction slaves, each process can be designed and wired as separated blocks. If an error occurs on one slave device, operation of the process that uses the slave stops, but that will not influence the entire system operation. The EtherCAT junction slave will contribute to prevention of loss of workpieces in process and prompt system restoration.

Process A
Process B
Process C
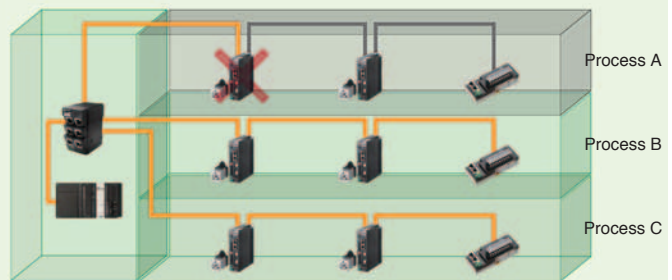
■Ordering Information

Product name		No. of ports	Dimentions	Power supply voltage	Model	Standards
EtherCAT junction slaves		3	W25 x H90 x D78 mm	DC24V	GX-JC03	CE, UC1
		6	W48 x H90 x D78 mm	DC24V	GX-JC06	

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Authorized Distributor:

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