

OMRON

Instruction Manual for CK3M-series Encoder Input UNIT and Laser Interface UNIT

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Precautions for Compliance with UL/CSA Standards and EU Directives

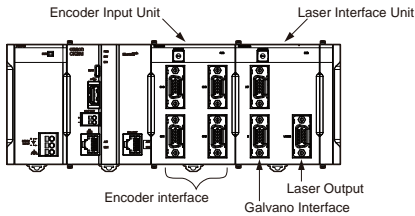
Notice to Users of the CK3M-series components in the USA, Canada and Europe

This manual must be consulted in all cases in order to find out the nature of the potential HAZARDS and any actions which have to be taken to avoid them. If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired. This product is defined as an in-panel device and must be installed within a control panel.

● Model

CK3W-ECS300, CK3W-GC1100, CK3W-GC1200, CK3W-GC2100 and CK3W-GC2200

● Electrical Rating



All external power sources must be class 2 or SELV power supplies with F4A over-current protection.

[Power consumption]

CK3W-ECS300:	5 VDC, 0.6W		
	24 VDC, 6.8W		
CK3W-GC1100:	5 VDC, 0.6W	CK3W-GC1200:	5 VDC, 0.6W
	24 VDC, 1.9W		24 VDC, 1.9W
CK3W-GC2100:	5 VDC, 0.6W	CK3W-GC2200:	5 VDC, 0.6W
	24 VDC, 1.0W		24 VDC, 1.0W

■ Encoder Interface for CK3W-ECS300

[Serial encoder]

Clock output: RS-422 line driver level, 1 point per channel, 4 channels
Digital input/output: RS-422 line receiver/driver level, 1point per channel, 4 channels

[Encoder power supply]

5 VDC, 0.5A per channel, 4 channels, 1A max. per Unit

■ Galvano Interface for CK3W-GC1100 / GC1200

[XY2-100 protocol]

XY-CLOCK output: RS-422 line driver level
XY-SNYC output: RS-422 line driver level
CHX output: RS-422 line driver level
CHY output: RS-422 line driver level
XY-STATUS input: RS-422 line receiver level
Z-CLOCK output: RS-422 line driver level
Z-SNYC output: RS-422 line driver level
CHZ output: RS-422 line driver level
Z-STATUS input: RS-422 line receiver level

■ Galvano Interface for CK3W-GC2100 / GC2200

[SL2-100 protocol]

XY-IN input: RS-422 line receiver level
XY-OUT output: RS-422 line driver level
Z-IN input: RS-422 line receiver level
Z-OUT output: RS-422 line driver level

■ Laser output for CK3W-GC1100 / GC1200 / GC2100 / GC2200

PWM: 5VDC, 20mA
TCR: 5VDC, 20mA only for CK3W-GC1200 / GC2200

● Environment

Indoor use only.
Altitude: 2,000 m max.
Surrounding Air Temperature: 0 to 55 °C
Surrounding Air Humidity: 10 to 95%
Pollution Degree 2

● Cleaning

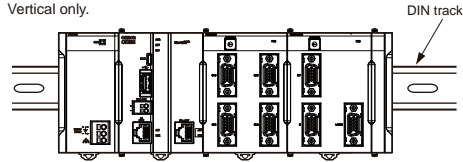
Do not use paint thinner or similar chemical to clean with. Use a dry cloth.

● Enclosure Type

Please use this product in a control board.
Enclosure type: Type 1 or more.

● Direction of Installation

Vertical only.



● I/O Wiring Diagram

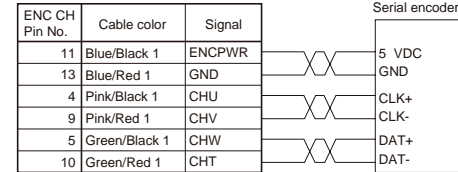
■ Encoder Interface (CH 0 to 3)

To connect to a serial encoder, use the following cable.

CK3W-CAES03A

The diagram for cables and device connections is shown below.

CK3W-CAES03A



■ Galvano Interface

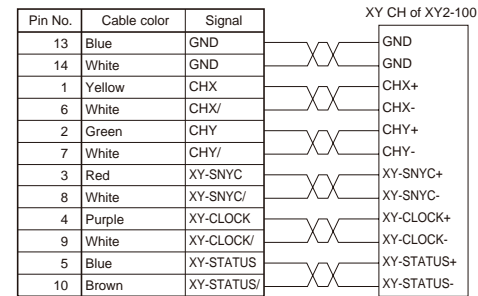
To connect to a Galvano interface cable, use the following cable.

CK3W-CAG03A

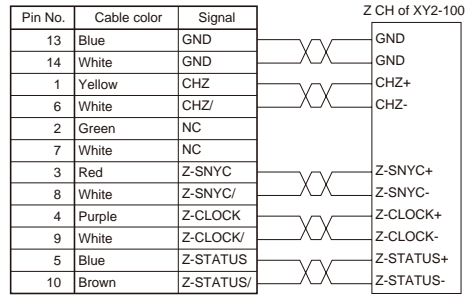
The diagram for cables and device connections is shown below.

[XY2-100 protocol]

CK3W-CAG03A

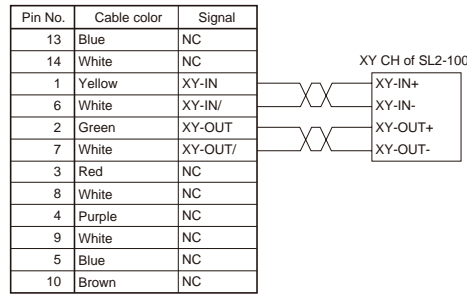


CK3W-CAG03A

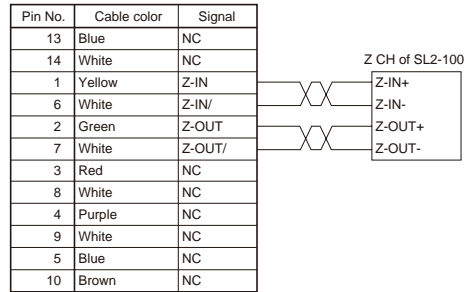


[SL2-100 protocol]

CK3W-CAG03A



CK3W-CAG03A



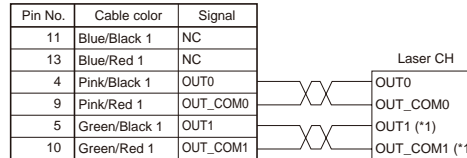
■ Laser Output

To connect to a Laser Output cable, use the following cable.

CK3W-CAES03A

The diagram for cables and device connections is shown below.

CK3W-CAES03A



(*1) OUT1 is only for CK3W-GC1200. When CK3W-GC1100, this terminal is NC.

Conformance to UL/CSA Standards

● Accessory Cables

As shown in the table below, accessory cables are available.

Encoder interface cable	Interface	Model	Manufacturer
	Serial encoder	CK3W-CAES03A	OMRON corporation
Galvano interface cable	· XY2-100 · SL2-100	CK3W-CAG03A	
Laser output cable	Laser Out	CK3W-CAES03A	

These accessory cables are Internal Wiring only. Separate the accessory cable 50.8 mm (2 inch) or more from more than 150 V circuit, 6.4 mm (1/4 inch) or more from less than 150 V circuit.

Conformance to EU Directives

This is a class A product. In a residential areas it may cause radio interference, in which case the user may be required to take adequate measures to reduce interference.

Conformance to KC Standard

사용자 안내문

이 기기는 업무용 환경에서 사용할 목적으로 적합성평가를 받은 기기로서 가정용 환경에서 사용하는 경우 전파관섭의 우려가 있습니다.

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Note: Specifications subject to change without notice.