

OMRON

Instruction Manual for CK3M/CK5M-series Power Supply UNIT and CPU UNIT

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Precautions for Compliance with UL/CSA Standards, EU Directives and UK Legislations

Notice to Users of the CK3M/CK5M-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.

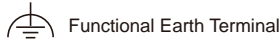
This product is defined as an in-panel device and must be installed within a control panel.

● Model

Power Supply Unit: CK3W-PD048

CPU Unit: CK3M-CPU101, CK3M-CPU111, CK3M-CPU121, CK5M-CPU131 and CK5M-CPU141

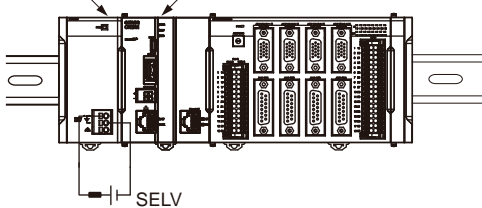
● Marking



Functional Earth Terminal

● Electrical Rating

Power Supply Unit CPU Unit



- Over-current protection (Current limitation: F4A, 24 VDC minimum)
- Use fuses of either of the following categories
 - cULus Listed
 - UL Listed and CSA certified

External power source for Power supply unit must be SELV power supply with F4A over-current protection.

■ Power Supply Unit

Input Source: 24 V DC (-15% to +10%), 101.7 W max.

Power Output: 24 V DC, 66 W max.
5 V DC, 23 W max.

■ CPU Unit

[Power consumption]

CK3M-CPU101: 5 V DC, 7.2 W

CK3M-CPU111: 5 V DC, 7.8 W

CK3M-CPU121: 5 V DC, 7.8 W

CK5M-CPU131: 5 V DC, 7.2 W

24V DC, 3.3W

CK5M-CPU141: 5 V DC, 7.2 W

24V DC, 3.3W

[Digital output]

24 V DC (RES.), (P.D.), 0.1 A

● 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

● Cable for I/O Terminal

Please select the cable by which rated temperature is 75°C or above.

● Cleaning

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

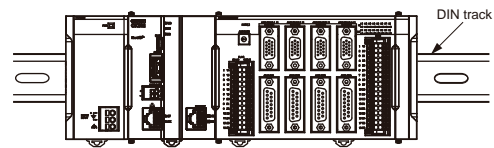
● Enclosure Type

Please use this product in a control board.

Enclosure type: Type 1 or more.

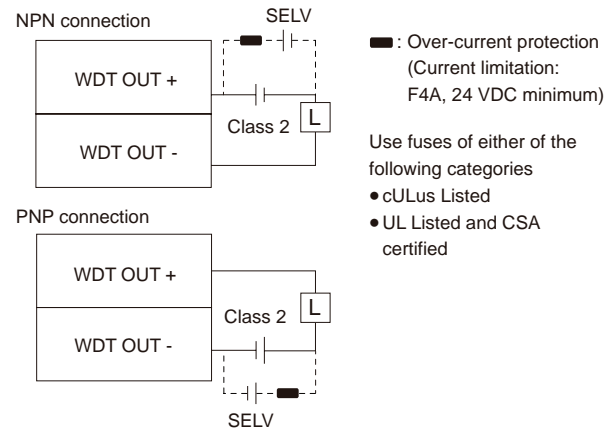
● Direction of Installation

Vertical only.



● I/O Wiring Diagram

■ CPU Unit (Digital output)



External power source of IO circuit for CPU units must be class 2 or SELV power supply with F4A over-current protection.

Conformance to UL/CSA Standards

● Terminal Connection Diagram

1. Do not use ferrule terminals. Insert the stranded or solid wire directly into the holes on the terminal block.

Strip length

Power Supply Unit: 8 mm

CPU Unit (Digital output): 8 mm

2. Wire size

Power Supply Unit: AWG 12 to AWG 24, Solid, CU

AWG 14 to AWG 24, Strand, CU

CPU Unit (Digital output): AWG 16 to AWG 24, Solid or Strand, CU

Conformance to EMC regulations

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 전파간섭의 우려가 있습니다.

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Note: Specifications subject to change without notice.