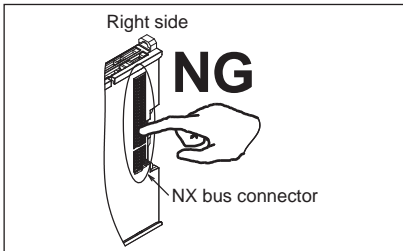
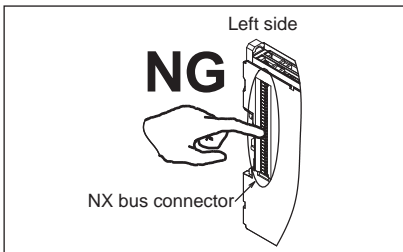


Do not touch the NX bus connector



5377009-0A

OMRON

NX series INSTRUCTION SHEET

© OMRON Corporation 2018 All Rights Reserved.

Precautions for Compliance with UL Standards, CSA Standards and EU Directives

Notice to Users of the NX series components in 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.

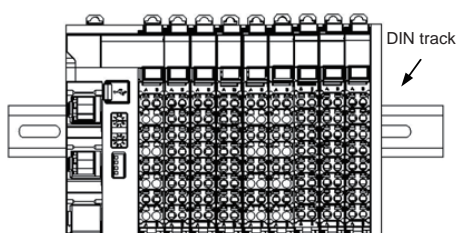
If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

Environment

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

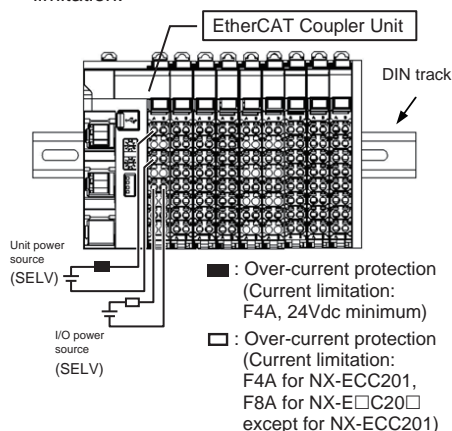
Direction for installation

Vertical only.

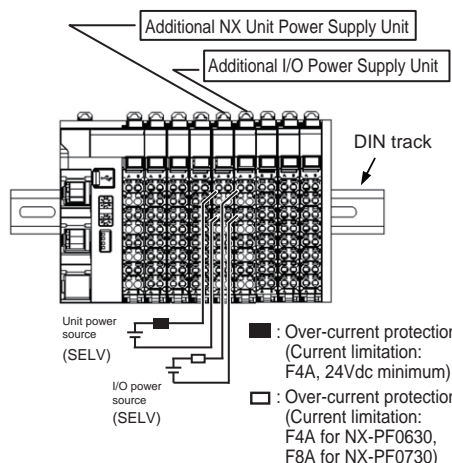


Current restrictions from power supply connector

The external power supplies must be DC power supplies that satisfy the SELV requirements. It must be equipped with an over-current protection with current limitation.



Use fuses of either of the following categories
 •cULus Listed
 •UL Listed and CSA certified



Use fuses of either of the following categories
 •cULus Listed
 •UL Listed and CSA certified

Cleaning

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

Cable

Please select the cable by which rated temperature is 80°C or above.

Enclosure type

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

Power consumption

- NX unit power consumption is as follows:
- NX-HAD401 : 3.3 W, 5.8V
- NX-HAD402 : 3.3 W, 5.8V
- I/O Power INPUT : 8A max, 5-24V
- I/O Power OUTPUT : 8A max, 5-24V

Rating

- NX-HAD401:
- Digital Input:24V dc, 3.5 mA/P, 4 pts(NPN type), SELV
- Device supply:0.1A/P, 4 pts
- Analog Input:-10 to +10 V, 0 to 10V, -5 to 5V, 0 to 5V, 1 to 5V, 0 to 20 mA, 4 to 20 mA, DIFFERENTIAL, 4 pts
- NX-HAD402:
- Digital Input:24V dc, 3.5 mA/P, 4 pts(PNP type), SELV
- Device supply:0.1A/P, 4 pts
- Analog Input:-10 to +10 V, 0 to 10V, -5 to 5V, 0 to 5V, 1 to 5V, 0 to 20 mA, 4 to 20 mA, DIFFERENTIAL, 4 pts

Operating Temperature Code

T4A

Conformance to UL Standards and CSA Standards

Compliance with Class I Division 2 Hazardous Location:

Input and output wiring must be in accordance with Class I, Div. 2 wiring methods and in accordance with the authority having jurisdiction.

- This equipment is suitable for use in Class I, Div.2, Group A, B, C, D or Non-Hazardous Locations Only.
- WARNING - EXPLOSION HAZARD - DO NOT DISCONNECT EQUIPMENT INPUT TERMINAL OR BUS CONNECTOR WHILE THE CIRCUIT IS LIVE OR UNLESS THE AREA IS KNOWN TO BE FREE OF IGNITABLE CONCENTRATIONS
- This device is open-type and is required to be installed in an enclosure suitable for the environment and that can only be accessed with the use of a tool or key.

- Cet équipement convient à l'utilisation dans des emplacements de Classe I, Division 2, Groupes A, B, C, D, ou ne convient qu'à l'utilisation dans des endroits non dangereux.
- AVERTISSEMENT - RISQUE D'EXPLOSION - NE PAS DECONNECTER LA BORNE D'ENTREE DE L'EQUIPEMENT OU LE CONNECTEUR DE BUS PENDANT QUE LE CIRCUIT EST SOUS TENSION SAUF DANS LES EMPLACEMENTS EST DESIGNÉ LOIN DE LES INFLAMMABLE CONCENTRATIONS.

- Ce dispositif est de type ouvert et doit être installé dans un coffret adapté à l'environnement et auquel on ne pourra accéder uniquement au moyen d'un outil ou d'une cle.

Conformance to EU Directives

This product is EMC-compliant when assembled in PLC system or Machine Automation Controller. To ensure the EU Directive conformance of customer's machinery or equipment in which the product is incorporated, be sure to observe the following precautions.

- This product is defined as an in-panel device and must be installed within a control panel.
- The SELV requirements must be satisfied for the DC power supply connected to the DC Power Supply Unit, Communications Unit, and I/O Unit.
- This product complies with the common emission standard (EN61131-2, EN61000-6-4) with regard to EMI. For the radiated emission requirement (10-m regulations), in particular, please note that the actual emission varies depending on the configuration of the control panel to be used, the connected devices, and wiring methods. Therefore, the customer must confirm the EU Directive conformance of the overall machinery or equipment by themselves, even if this EU conforming product is used.

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

We have confirmed that this product conforms to EMC standards with OMRON S8VK-S series Power Supplies.

Applicable wire size for Unit power source and IO power source terminal

Current limitation	Type	Strip length	Conductor surface
4A max.	Solid/Strand	9mm	Plated
Exceeds 4A	Strand	9mm	Plated

Do not use ferrule terminals. Insert the strand or solid wire directly into the holes on the terminal block.
 Please select wire size suitable for rated current.

Wire size	Current (MAX)
AWG 24	2A
AWG 22	3A
AWG 20	5A
AWG 18	7A
AWG 16	10A

Applicable wire size for IO terminal

Type	Wire size	Strip length
Solid/Strand	AWG 28-16	9mm

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

Conformance to KC Standards

Observe the following precaution if you use NX-series Unit in Korea.

- A 급 기기 (업무용 방송통신기자재) 이 기기는 업무용 (A 급) 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정외의 지역에서 사용하는 것을 목적으로 합니다.

Class A Device (Broadcasting Communications Device for Office Use)
 This device obtained EMC registration for office use (Class A), and it is intended to be used in places other than homes.
 Sellers and/or users need to take note of this.

OMRON

OMRON Corporation (Manufacturer)
 Control Devices Division H.Q.
 Shiokoji Horikawa, Shimogyo-ku, Kyoto, 600-8530
 Japan
 Tel: (81)75-344-7109
 Fax: (81)75-344-7149

Regional Headquarters
 OMRON EUROPE B.V. (Importer in EU)
 Wegalaan 67-69, 2132 JD Hoofddorp
 The Netherlands
 Tel: (31)2356-81-300
 Fax: (31)2356-81-388

OMRON ELECTRONICS LLC
 2895 Greenspoint Parkway, Suite 200 Hoffman
 Estates, IL 60169 U.S.A.
 Tel: (1) 847-843-7900
 Fax: (1) 847-843-7787

OMRON ASIA PACIFIC PTE. LTD.
 No. 438A Alexandra Road # 05-05/08 (Lobby 2),
 Alexandra Technopark, Singapore 119967
 Tel: (65)6835-3011
 Fax: (65)6835-2711

OMRON (CHINA) CO., LTD.
 Room 2211, Bank of China Tower, 200 Yin Cheng
 Zhong Road, PuDong New Area, Shanghai, 200120
 China
 Tel: (86)21-5037-2222
 Fax: (86)21-5037-2200

Note: Specifications are subject to change without notice.
 Printed in China

