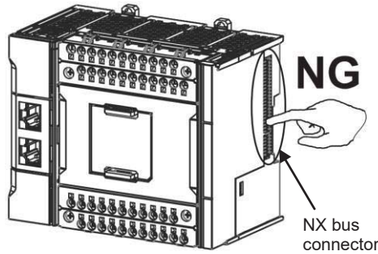
Do not touch the NX bus connector



9609418-8E

OMRON

SYSMAC NX1P2 and NX1W series INSTRUCTION SHEET

Precautions for Compliance with UL/ CSA Standards and EU Directives

Notice to Users of SYSMAC NX1P2 and NX1W series 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 by the equipment may be impaired.
This product is used as industrial equipment and is defined as an in-panel device and must be installed within a control panel.

● Environment

Power Supply Voltage:	DC24V (85% to 120%)
Ambient Temperature:	0 to 55 °C (Avoid freezing or condensation)
Ambient Humidity:	10% to 95%RH
Altitude:	2000m max.
Installation Environment:	Pollution Degree2 Overvoltage Category II
Temp. code	T4A
Indoor Use Only	

● 24-V DC power source

The external power supplies must be DC power supplies that satisfy the SELV requirements.

Power consumption : 24V DC, 0.86A NX UNIT POWER
OUTPUT :10W, 5.8V

● I/O specifications

NX1P2 series.
INPUT specification

NX1P2-9024DT☐	24V DC, 5.8mA 14 POINTS
NX1P2-1☐40DT☐	24V DC, 5.8mA 16 POINTS/ 5.3mA 8 POINTS

OUTPUT specification

NX1P2-9024DT	12-24V DC(GEN.)(TUN.)(P.D.) 0.3A/P, 2.4A/C, 2.4A/U 10POINTS, NPN
NX1P2-9024DT1	24V DC(GEN.)(TUN.)(P.D.) 0.3A/P, 2.4A/C, 2.4A/U 10POINTS, PNP
NX1P2-1☐40DT	12-24V DC(GEN.)(TUN.)(P.D.) 0.3A/P, 1.8A/C, 3.6A/U 16POINTS, NPN
NX1P2-1☐40DT1	24V DC(GEN.)(TUN.)(P.D.) 0.3A/P, 1.8A/C, 3.6A/U 16POINTS, PNP

NX1W series.

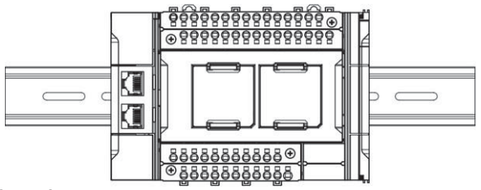
NX1W-CIF01	-
NX1W-CIF11	-
NX1W-CIF12	-
NX1W-ADB21	Input: 0 to 10 V, 0 to 20 mA, 2 points
NX1W-DAB21V	Output: 0 to 10 V, 2 points
NX1W-MAB221	Input: 0 to 10 V, 0 to 20 mA, 2 points, Output: 0 to 10 V, 2 points

● Cable for I/O terminal ⚠

- Please select the cable by which rated temperature is 80 °C or above.
  Veuillez sélectionner le câble avec lequel la température nominale est égale ou supérieure à 80 °C.
- Use Copper Conductors only.
  N'utilisez que des conducteurs en cuivrs.

● Directions for installation

Vertical only.



● Cleaning

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

● Enclosure type

You must use this product in a control board.

Enclosure type: Type 1 or more.

● Marking

⏚: Functional Earth Terminal

● Battery (optional)

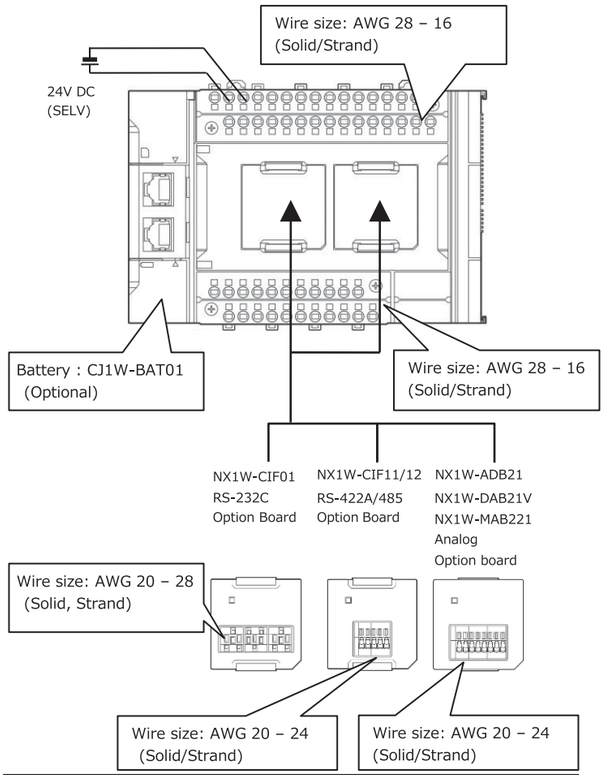
Mount the CJ1W-BAT01 Battery (sold separately) to an NX1P2 series CPU unit if clock data need to be retained after a power interruption.

➢ Installing the battery.

1. Remove the battery cover on CPU unit and carefully draw out the Battery. Connect the new Battery, place it into the compartment, and close the cover.

➢ Replacing the battery.

1. Turn OFF the power supply to the NX1P2 series CPU unit. If the CPU unit has not been ON, turn it ON for at least 5 minutes and then turn it OFF.
2. Remove the battery cover on CPU unit and carefully draw out the Battery. Remove the Battery connector. Connect the new Battery, place it into the compartment, and close the cover.



Compliance 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.

1. This equipment is suitable for use in Class I, Division.2, Groups A, B, C, D or Non-Hazardous Locations Only.
2. WARNING: Explosion Hazard – Do not Disconnect Equipment Unless Power Has Been Switched off or the Area Is Known to Be Non-Hazardous
3. This device is open-type and is required to be installed in an enclosure suitable for the environment and can only be accessed with the use of a tool or key

1. CET APPAREILLAGE EST UTILISABLE DANS LES EMPLACEMENTS DE CLASS I, DIVISION 2, GROUPES A, B, C ET D, OU DANS LES EMPLACEMENTS NON DANGEREUX SEULEMENT.
2. AVERTISSEMENT–ISQUE D'EXPLOSION–AVANT DE DECONNECTER L'EQUIPEMENT, COUPER LE COURANT OU S'ASSURER QUE L'EMPLACEMENT EST DESIGNE NON DANGEREUX.
3. CE DISPOSITIF EST DE TYPE OUVERT ET DOIT ETRE INSTALLE DANS UN COFFRET ADAPTE A L'ENVIRONNEMENT ET AUQUEL ON NE POURRA ACCEDER UNIQUEMENT AU MOYEN D'UNOUTIL OU D'UNE CLE.

● Applicable wire size for Unit power source and I/O terminal

Type	Wire size	Strip length	Conductor surface
Solid/Strand	AWG 28-16	9mm	Plated
Solid/Strand	AWG 14	11mm	Plated

- Do not use ferrule terminals. Insert the strand or solid wire directly into the holes on the terminal block.
- Do not insert more than one wire in one terminal.
- Please select wire sizes suitable for rated current.

Wire size	Current (MAX)
AWG 28 - 24	2A
AWG 22	3A
AWG 20 - 16	5A

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.

1. This product is defined as an in-panel device and must be installed within a control panel.
2. Reinforced insulation or double insulation must be used for the DC power supply connected to the DC power supply unit, communication unit, and I/O unit.
3. This product complies with the common emission standard (EN61131-2) 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 maybe required to take adequate measures to reduce interference.

For KC standard only

사 용 자 안 내

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

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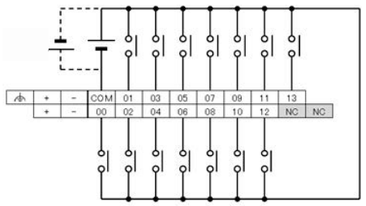
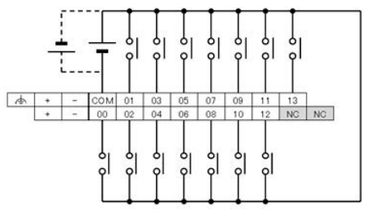
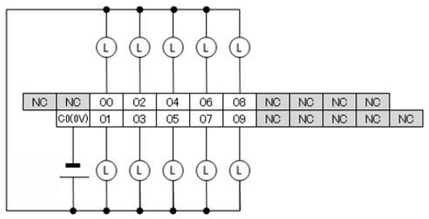
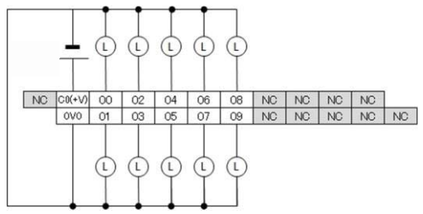
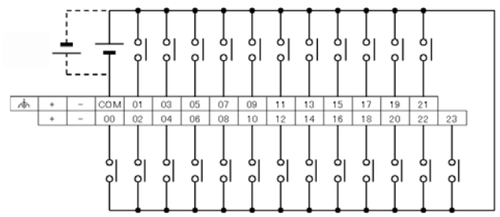
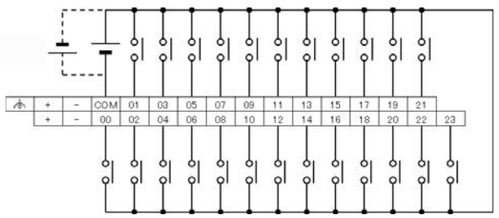
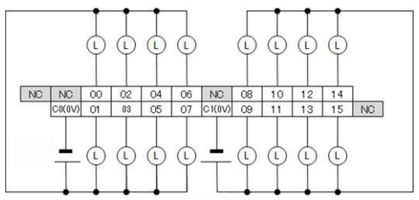
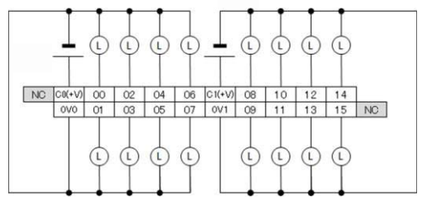
Note: Specifications subject to change without notice.
Printed in China

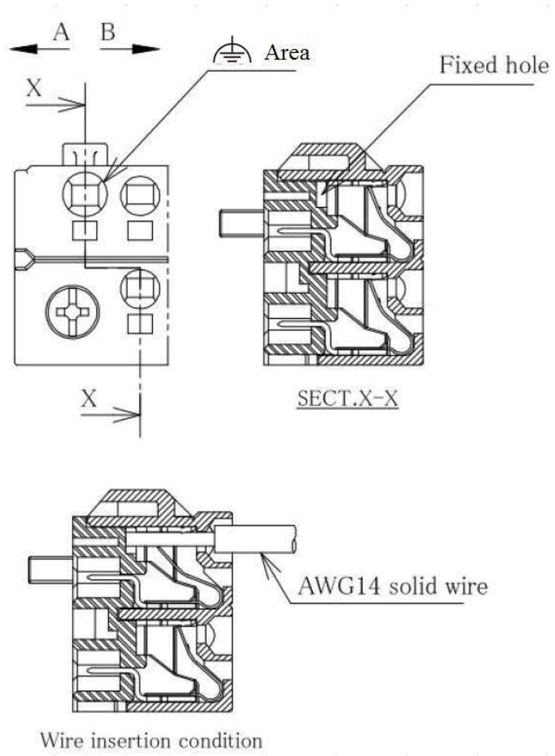
● I/O Wiring Diagram

NX1P2-9024DT 24-V DC input (14 Points) Transistor (NPN) Output (10 Points)	NX1P2-9024DT1 24-V DC input (14 Points) Transistor (PNP) Output (10 Points)
Upper Terminal Block 	Upper Terminal Block 
Lower Terminal Block 	Lower Terminal Block 

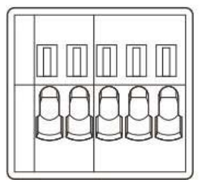
NX1P2-1□40DT 24-V DC input (24 Points) Transistor (NPN) Output (16 Points)	NX1P2-1□40DT1 24-V DC input (24 Points) Transistor (PNP) Output (16 Points)
Upper Terminal Block 	Upper Terminal Block 
Lower Terminal Block 	Lower Terminal Block 

*Note : The wiring of the ⏚ Functional Earth Terminal

Push AWG14 solid wire into functional earth area, and sway it both A and B side slightly until top of wire goes into fixed hole



● Option board

NX1W-CIF01	NX1W-CIF1□	
		
NX1W-ADB21	NX1W-DAB21V	NX1W-MAB221