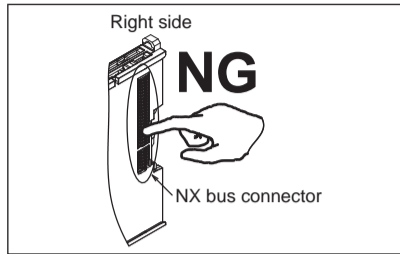
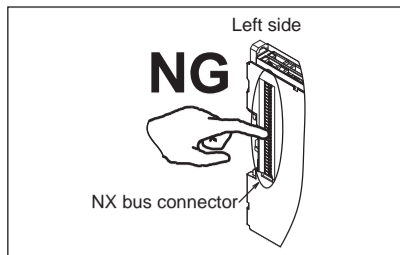


Do not touch the NX bus connector



3615353-3B

# OMRON

## NX series INSTRUCTION SHEET

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### Precautions for Compliance with UL Standards, CSA Standards, EU Directives and UK legislation

#### Notice to Users of the NX series components in USA, Canada and Europe

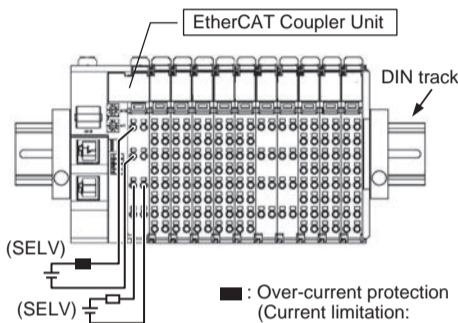
This manual must be consulted in all cases in order to find out the nature of the potential HAZARDS and any actions which have to be taken to avoid them. If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

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

This product is a SELV circuit.

#### External Power Supply Condition and Current Restriction

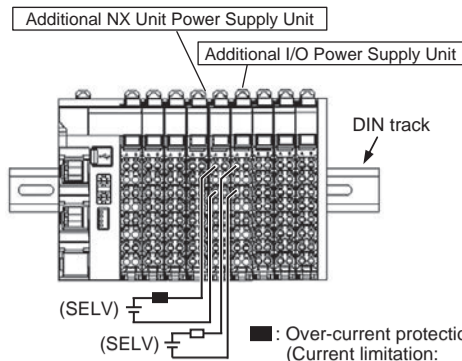
The external power supplies must be DC power supplies that satisfy the SELV requirements. It must be equipped with an over-current protection with current limitation.



Use fuses of either of the following categories

- cULus Listed
- UL Listed and CSA certified

- : Over-current protection (Current limitation: F4A, 24 VDC minimum)
- : Over-current protection (Current limitation: F4A for NX-ECC201, F8A for NX-E□C20□ except for NX-ECC201)



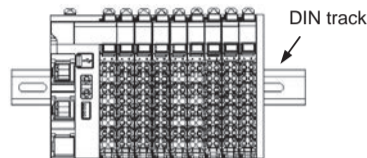
Use fuses of either of the following categories

- cULus Listed
- UL Listed and CSA certified

- : Over-current protection (Current limitation: F4A, 24 VDC minimum)
- : Over-current protection (Current limitation: F4A for NX-PF0630, F8A for NX-PF0730)

#### Direction for installation

Vertical only.



#### 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 90°C or above.

#### Enclosure type

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

#### Operating Temperature Code

T4A

#### Power consumption

NX unit power consumption is as follows:  
 NX-HTC4505-5: 1.95 W  
 NX-HTC3510-5: 1.55 W

### Conformance to UL/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, Div.2, Group 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 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.
2. AVERTISSEMENT: Risque d'explosion - Avant de débrancher l'équipement, couper le courant ou s'assurer que l'emplacement est désigné non dangereux.
3. 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.

#### Control output

Control output of this unit is SELV circuit.

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

Current limitation	Type	Strip length	Conductor surface
4 A max.	Solid/Strand	9 mm	Plated
Exceeds 4 A	Strand	9 mm	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	2 A
AWG 22	3 A
AWG 20	5 A
AWG 18	7 A
AWG 16	10 A

#### I/O specifications

##### Temperature Control Units

##### Temperature/Analog input 8 POINTS Type

NX-HTC4505-5	<ul style="list-style-type: none"> <li>• Voltage OUTPUT: 12 to 28.8 VDC, 21 mA/P, 8 POINTS, PNP</li> <li>• CT INPUT: 0 to 125 mA, SINGLE ENDED 8 POINTS</li> </ul>
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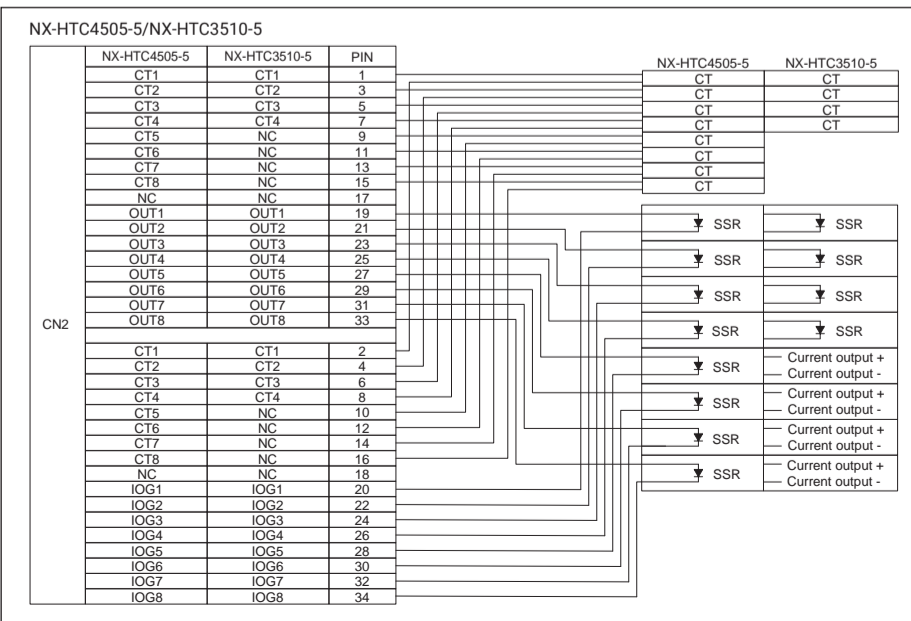
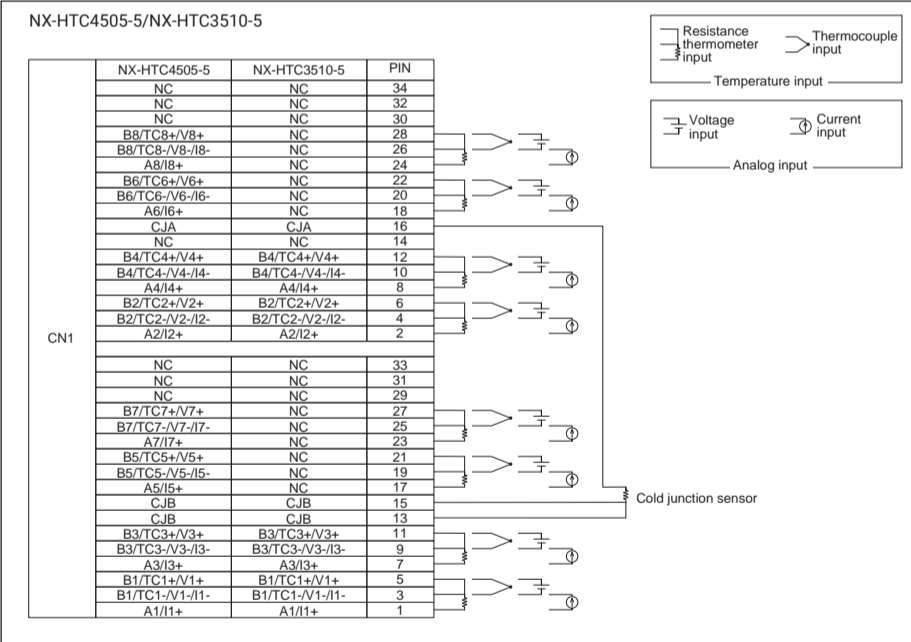
##### Temperature/Analog input 4 POINTS Type

NX-HTC3510-5	<ul style="list-style-type: none"> <li>• Voltage OUTPUT: 12 to 28.8 VDC, 21 mA/P, 4 POINTS, PNP</li> <li>• Linear Current OUTPUT: 0 to 20 / 4 to 20 mA, 4 POINTS</li> <li>• CT INPUT: 0 to 125 mA, SINGLE ENDED 4 POINTS</li> </ul>
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#### Environment

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

#### Terminal connection diagram



### Conformance to EU Directives and UK legislation

This product is EMC-compliant when assembled in PLC system or Machine Automation Controller. To ensure the EU Directive and UK legislation 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. 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 and UK legislation conformance of the overall machinery or equipment by themselves, even if this EU and UK 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.

**Note:** When complying with EMC standards, both the line connecting the sensor and one connecting the output device must be 30 m or less. If they exceed 30 m, compliance with EMC standards will not be possible.

## OMRON

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**Note:** Specifications are subject to change without notice.

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### Conformance to KC Standards

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

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

**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.

