

## NX-series Digital I/O Unit

## NX-ID/IA/OD/OC/MD

CSM\_NX-ID\_IA\_OD\_OC\_MD\_DS\_E\_9\_1

**A wide range of digital I/O units  
from general purpose use to  
high-speed synchronous control**

- I/O modules on the NX CPU Unit or EtherCAT® Coupler Unit
- Connect to the NJ/NX/NY Controller via EtherCAT



## Features

- High-speed I/O refreshing using the EtherCAT coupler
- I/O refreshing synchronized with the control cycle of the controller (synchronous refreshing)
- Time-stamp inputs and outputs anywhere in the EtherCAT network can be independently controlled with sub-microsecond accuracy
- Detachable terminals for easy maintenance
- Screwless Push-In Plus terminal block or MIL/Fujitsu/OTAX connector speeds up installation
- Compact with a width of 12 mm per unit (connector type: 30 mm)
- 4, 8, 16 or 32 inputs for flexible I/O configuration (NX-ID/IA)
- 2, 4, 8, 16 or 32 outputs for flexible I/O configuration (NX-OD/OC)
- Connect to the CJ PLC using the EtherNet/IP™ bus coupler

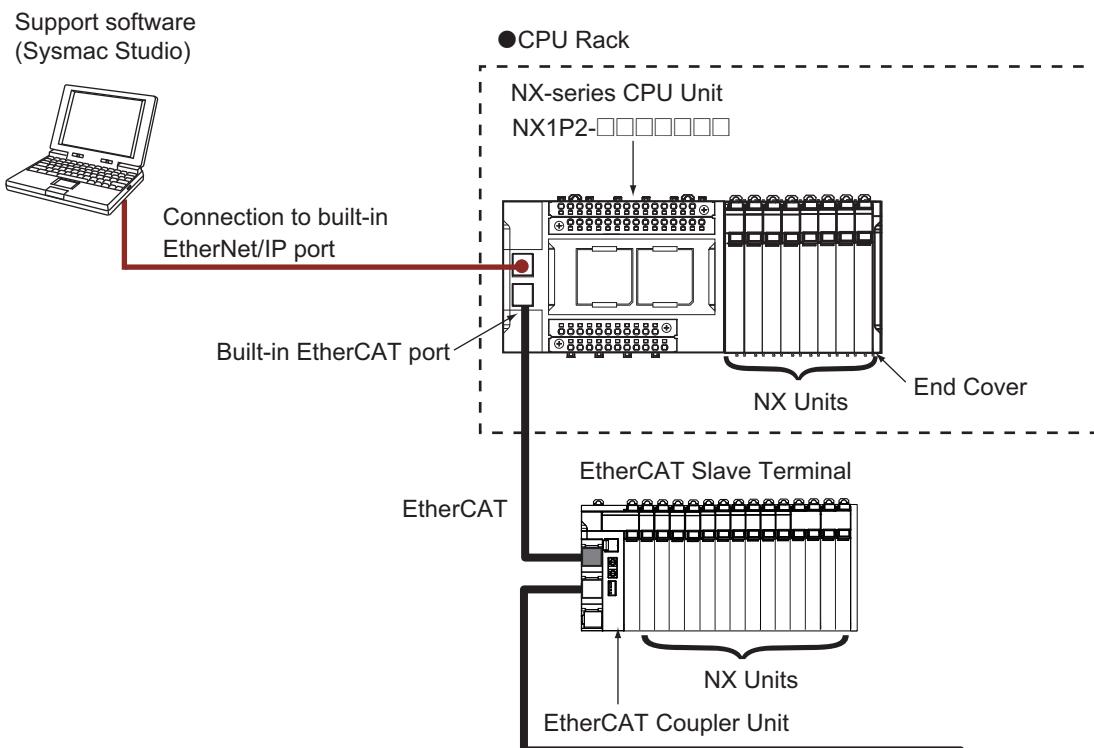
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## System Configurations

### Connected to a CPU Unit

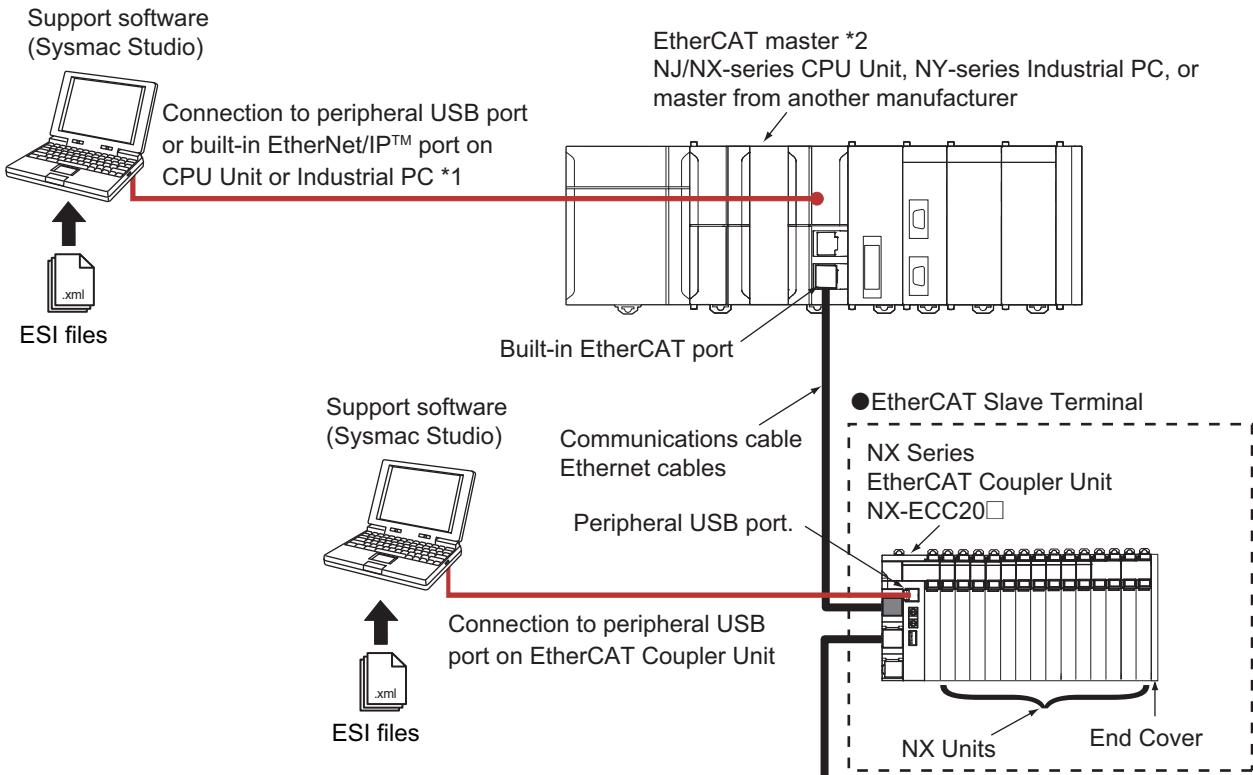
The following figure shows a system configuration when NX Units are connected to an NX-series CPU Unit.



**Note:** For whether an NX Unit can be connected to the CPU Unit, refer to the version information.

### Connected to an EtherCAT Coupler Unit

The following figure shows an example of the system configuration when an EtherCAT Coupler Unit is used as a Communications Coupler Unit.



\*1. The connection method for the Sysmac Studio depends on the model of the CPU Unit or Industrial PC.

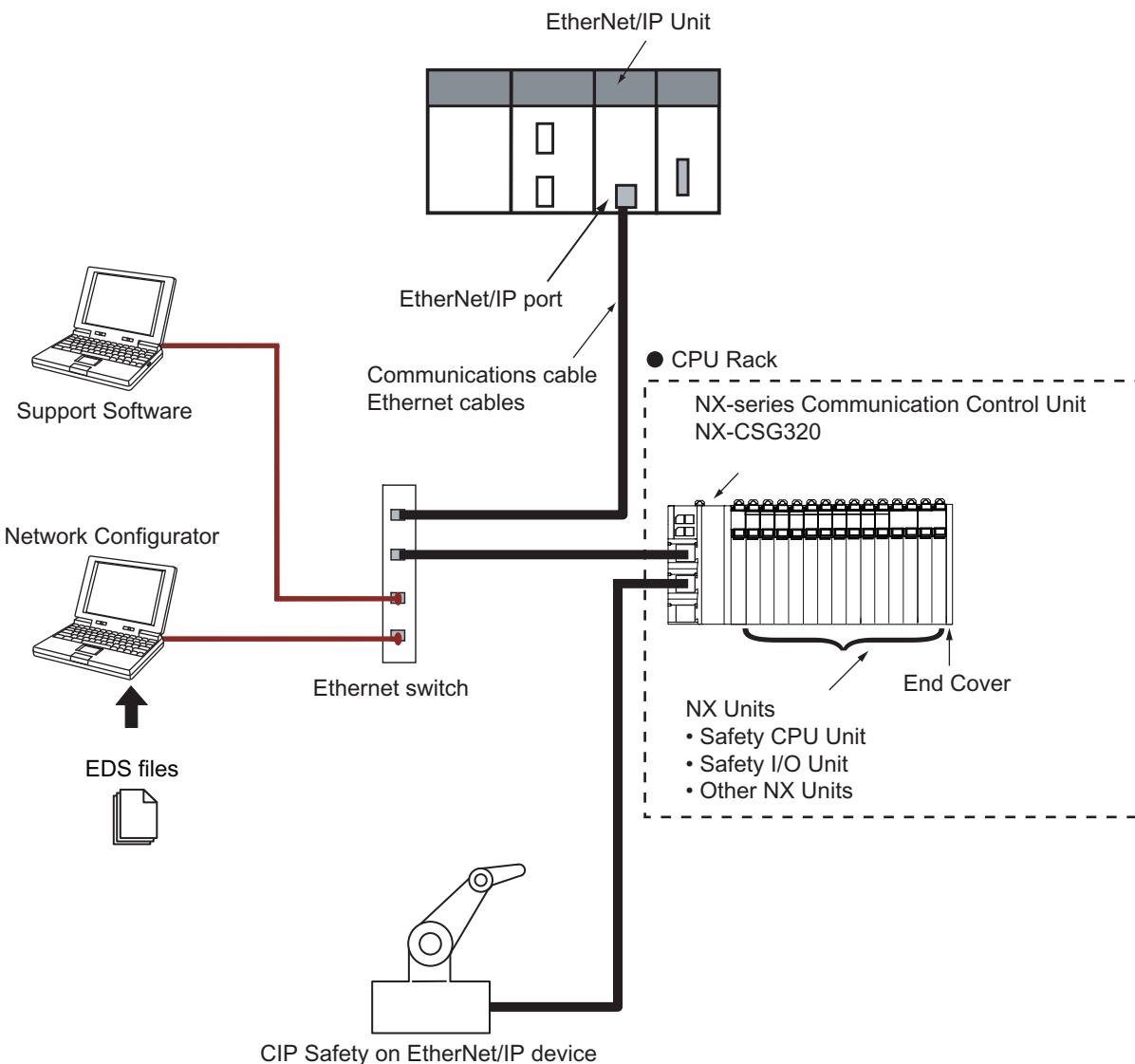
\*2. An EtherCAT Slave Terminal cannot be connected to any of the OMRON CJ1W-NC□81/□82 Position Control Units even though they can operate as EtherCAT masters.

**Note:** For whether an NX Unit can be connected to the Communications Coupler Unit, refer to the version information.

## System Configuration in the Case of a Communication Control Unit

The following figure shows a system configuration when a group of NX Units is connected to an NX-series Communication Control Unit. To configure a Safety Network Controller, mount the Safety CPU Unit, which is one of the NX Units, to the CPU Rack of the Communication Control Unit.

You cannot connect a Communication Control Unit with Digital I/O Units that support input refreshing with input changed time or output refreshing with specified time stamp.



**Note:** For whether an NX Unit can be connected to the Communication Control Unit, refer to the version information.

## Model Number Structure

**NX-□□□□□-□**

(1) (2) (3) (4) (5)

**(1) Unit type**

No.	Specification
ID	DC input
IA	AC input
OD	Transistor output
OC	Relay output
MD	DC input/Transistor output

**(2) Number of points**

No.	Specification
2	2 points
3	4 points
4	8 points
5	16 points
6	32 points, or 16 points each for inputs and outputs

**(3) I/O type**

No.	Inputs	Outputs	Mixed I/O (Input, Output)
1	For both NPN/PNP	NPN	For both NPN/PNP, NPN
2	---	PNP	For both NPN/PNP, PNP
3	NPN	---	---
4	PNP	---	---
6	---	N.O.	---
7	---	N.O.+N.C.	---

**(5) External connection terminals**

No.	Specification
None	Screwless clamping terminal block
-1	M3 screw terminal block
-5	MIL connector
-6	Fujitsu/OTAX connector

**(4) Other specifications**

## Digital Input Units

No.	Input voltage	ON/OFF response time		I/O refreshing method	
		Exceeds 1 μs	1 μs max.	Free-Run refreshing *1 only or Switching Synchronous I/O refreshing *2 and Free-Run refreshing	Input refreshing with input changed time only
17	12 to 24 VDC or 240 VAC	Yes	---	Yes	---
42	24 VDC	Yes	---	Yes	---
43		---	Yes	Yes	---
44		---	Yes	---	Yes

\*1 Free-Run refreshing

\*2 Synchronous I/O refreshing

## Digital Output Units

No.	Rated voltage	Load current	ON/OFF response time		I/O refreshing method		Other functions
			Exceeds 1 μs	1 μs max.	Free-Run refreshing *1 only or Switching Synchronous I/O refreshing *2 and Free-Run refreshing	Output refreshing with specified time stamp only	
21	12 to 24 VDC or 240 VAC	0.5 A	Yes	---	Yes	---	---
33	24 VDC	2 A	Yes	---	Yes	---	---
53		0.5 A	---	Yes	Yes	---	---
54			---	Yes	---	Yes	---
56			Yes	---	Yes	---	Yes
57			---	Yes	Yes	---	Yes
58			---	Yes	---	Yes	Yes
68		2 A	Yes	---	Yes	---	Yes

\*1 Free-Run refreshing

\*2 Synchronous I/O refreshing

## Digital Mixed I/O Units

No.	Input section		Output section				Other functions	
	Rated input voltage	Rated voltage	Load current	ON/OFF response time		I/O refreshing method		
				Exceeds 1 μs	1 μs max.			
21	24 VDC	12 to 24 VDC	0.5 A	Yes	---	Switching Synchronous I/O refreshing and Free-Run refreshing	Yes	
56		24 VDC		Yes	---		---	

## Ordering Information

### Applicable standards

Refer to the OMRON website ([www.ia.omron.com](http://www.ia.omron.com)) or ask your OMRON representative for the most recent applicable standards for each model.

### Digital Input Units

Product Name	Specifications					Model	
	Number of points	Internal I/O common	Rated input voltage	I/O refreshing method	ON/OFF response time		
DC Input Unit  (Screwless Clamping Terminal Block, 12 mm Width/24 mm Width)	4 points	NPN	12 to 24 VDC	Switching Synchronous I/O refreshing and Free-Run refreshing	20 µs max./400 µs max.	NX-ID3317	
			24 VDC	Input refreshing with input changed time only *1	100 ns max./100 ns max.	NX-ID3343	
		PNP	12 to 24 VDC	Switching Synchronous I/O refreshing and Free-Run refreshing	20 µs max./400 µs max.	NX-ID3417	
				Input refreshing with input changed time only *1	100 ns max./100 ns max.	NX-ID3443	
	8 points	NPN				NX-ID4342	
		PNP				NX-ID4442	
	16 points	NPN				NX-ID5342	
		PNP				NX-ID5442	
	32 points	NPN				NX-ID6342	
		PNP				<u>NEW</u>	
DC Input Unit  (M3 Screw Terminal Block, 30 mm Width)	16 points	For both NPN/PNP	24 VDC	Switching Synchronous I/O refreshing and Free-Run refreshing	20 µs max./400 µs max.	NX-ID5142-1	
DC Input Unit  (MIL Connector, 30 mm Width)	16 points	For both NPN/PNP	24 VDC	Switching Synchronous I/O refreshing and Free-Run refreshing	20 µs max./400 µs max.	NX-ID5142-5	
DC Input Unit  (Fujitsu/OTAX Connector, 30 mm Width)	32 points	For both NPN/PNP	24 VDC	Switching Synchronous I/O refreshing and Free-Run refreshing	20 µs max./400 µs max.	NX-ID6142-5	
AC Input Unit  (Screwless Clamping Terminal Block, 12 mm Width)	4 points	200 to 240 VAC, 50/60 Hz (170 to 264 VAC, ±3 Hz)		Free-Run refreshing	10 ms max./40 ms max.	NX-IA3117	

\*1. To use input refreshing with input changed time, the EtherCAT Coupler Unit with unit version 1.1 or later and the Sysmac Studio version 1.07 or higher are required.

## Digital Output Units

Product Name	Specifications						Model		
	Number of points	Internal I/O common	Maximum value of load current	Rated voltage	I/O refreshing method	ON/OFF response time			
Transistor Output Unit  	2 points	NPN	0.5 A/point, 1 A/Unit	24 VDC	Output refreshing with specified time stamp only *1	300 ns max./ 300 ns max.	<b>NX-OD2154</b>		
		PNP				300 ns max./ 300 ns max.	<b>NX-OD2258</b>		
	4 points	NPN	0.5 A/point, 2 A/Unit	12 to 24 VDC		0.1 ms max./ 0.8 ms max.	<b>NX-OD3121</b>		
						300 ns max./ 300 ns max.	<b>NX-OD3153</b>		
		PNP		24 VDC		0.5 ms max./ 1.0 ms max.	<b>NX-OD3256</b>		
						300 ns max./ 300 ns max.	<b>NX-OD3257</b>		
	8 points	NPN	0.5 A/point, 4 A/Unit	12 to 24 VDC		0.5 ms max./ 1.0 ms max.	<b>NX-OD3268</b>		
						0.1 ms max./ 0.8 ms max.	<b>NX-OD4121</b>		
		PNP		24 VDC		0.5 ms max./ 1.0 ms max.	<b>NX-OD4256</b>		
						0.1 ms max./ 0.8 ms max.	<b>NX-OD5121</b>		
Transistor Output Unit  	16 points	NPN	0.5 A/point, 5 A/Unit	12 to 24 VDC	Switching Synchronous I/O refreshing and Free- Run refreshing	0.5 ms max./ 1.0 ms max.	<b>NX-OD5256-1</b>		
						0.1 ms max./ 0.8 ms max.	<b>NX-OD5121-1</b>		
		PNP		24 VDC		0.1 ms max./ 0.8 ms max.	<b>NX-OD6121-5</b>		
						0.5 ms max./ 1.0 ms max.	<b>NX-OD6256-5</b>		
	32 points	NPN	0.5 A/point, 2 A/ common, 4 A/Unit	12 to 24 VDC		0.1 ms max./ 0.8 ms max.	<b>NX-OD5121-5</b>		
						0.5 ms max./ 1.0 ms max.	<b>NX-OD6121-5</b>		
		PNP		24 VDC		0.1 ms max./ 0.8 ms max.	<b>NX-OD6256-5</b>		
						0.5 ms max./ 1.0 ms max.	<b>NX-OD6121-6</b>		
Transistor Output Unit  	16 points	NPN	0.5 A/point, 2 A/Unit	12 to 24 VDC		0.1 ms max./ 0.8 ms max.	<b>NX-OD5121-5</b>		
						0.5 ms max./ 1.0 ms max.	<b>NX-OD5256-5</b>		
	32 points	NPN	0.5 A/point, 2 A/ common, 4 A/Unit	12 to 24 VDC		0.1 ms max./ 0.8 ms max.	<b>NX-OD6121-5</b>		
						0.5 ms max./ 1.0 ms max.	<b>NX-OD6256-5</b>		
Transistor Output Unit  	32 points	NPN	0.5 A/point, 2 A/ common, 4 A/Unit	12 to 24 VDC	Switching Synchronous I/O refreshing and Free- Run refreshing	0.1 ms max./ 0.8 ms max.	<b>NX-OD6121-6</b>		
						0.1 ms max./ 0.8 ms max.	<b>NX-OD6121-6</b>		
						0.1 ms max./ 0.8 ms max.	<b>NX-OD6121-6</b>		
Relay Output Unit  	2 points	Relay type: N.O.	250 VAC/2 A ( $\cos\phi=1$ ), 250 VAC/2 A ( $\cos\phi=0.4$ ), 24 VDC/2 A, 4 A/Unit	Free-Run refreshing	15 ms max./ 15 ms max.	<b>NX-OC2633</b>			
		Relay type: N.O.+N.C.				<b>NX-OC2733</b>			
	8 points	Relay type: N.O.	250 VAC/2 A ( $\cos\phi=1$ ), 250 VAC/2 A ( $\cos\phi=0.4$ ), 24 VDC/2 A, 8 A/Unit	Free-Run refreshing	15 ms max./ 15 ms max.	<b>NX-OC4633</b>			

\*1. To use input refreshing with input changed time, the EtherCAT Coupler Unit with unit version 1.1 or later and the Sysmac Studio version 1.07 or higher are required.

## Digital Mixed I/O Units

Product Name	Specifications					Model
	Number of points	Internal I/O common	Maximum value of load current	I/O refreshing method	ON/OFF response time	
<b>DC Input/Transistor Output Unit</b>  (MIL Connector, 30 mm Width)	Outputs: 16 points Inputs: 16 points	Outputs: NPN Inputs: For both NPN/PNP	Outputs: 12 to 24 VDC Inputs: 24 VDC	Switching Synchronous I/O refreshing and Free-Run refreshing	Outputs: 0.1 ms max./ 0.8 ms max. Inputs: 20 $\mu$ s max./ 400 $\mu$ s max.	NX-MD6121-5
		Outputs: PNP Inputs: For both NPN/PNP	Outputs: 24 VDC Inputs: 24 VDC		Outputs: 0.5 ms max./ 1.0 ms max. Inputs: 20 $\mu$ s max./ 400 $\mu$ s max.	
<b>DC Input/Transistor Output Unit</b>   (Fujitsu/OTAX Connector, 30 mm Width)	Outputs: 16 points Inputs: 16 points	Outputs: NPN Inputs: For both NPN/PNP	Outputs: 12 to 24 VDC Inputs: 24 VDC	Switching Synchronous I/O refreshing and Free-Run refreshing	Outputs: 0.1 ms max./ 0.8 ms max. Inputs: 20 $\mu$ s max./ 400 $\mu$ s max.	NX-MD6121-6

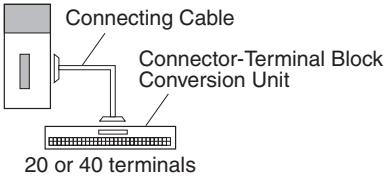
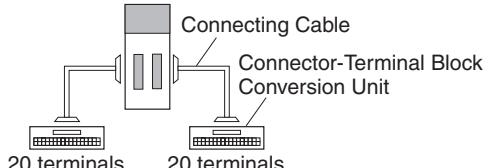
## Optional Products

Product name	Specification				Model	Standards
Unit/Terminal Block Coding Pins	For 10 Units (Terminal Block: 30 pins, Unit: 30 pins)				NX-AUX02	---
Product name	Specification				Model	Standards
	No. of terminals	Terminal number indications	Ground terminal mark	Terminal current capacity		
Terminal Block	8	A/B	None	10 A	NX-TBA082	---
	12				NX-TBA122	
	16				NX-TBA162	
	16	C/D			NX-TBB162	

## Accessories

Not included.

**Connection Patterns for Connector-Terminal Block Conversion Units**

Pattern	Configuration	Number of connectors	Branching
A	 <p>Connecting Cable Connector-Terminal Block Conversion Unit 20 or 40 terminals</p>	1	None
B	 <p>Connecting Cable Connector-Terminal Block Conversion Unit 20 terminals      20 terminals</p>	2	None

**Connections to Connector-Terminal Block Conversion Units**

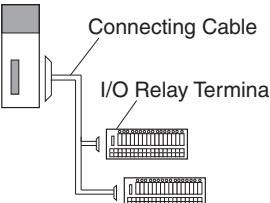
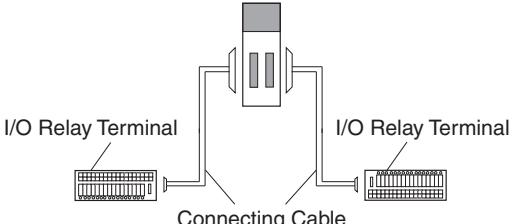
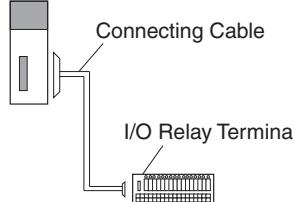
Unit	I/O capacity	Number of connectors	Polarity	Connection pattern	Connecting Cable *	Connector-Terminal Block Conversion Unit	Wiring method	Common terminal
NX-ID5142-5	16 inputs	1 MIL connector	NPN/ PNP	A	XW2Z-□□□X	XW2K-20G-T	Push-In Plus	No
					XW2Z-□□□X-R	XW2K-20G-O16A-IN	Push-In Plus	Yes
					XW2Z-□□□X	XW2D-20G6	Phillips screw	No
					XW2Z-□□□X	XW2R-E20GD-T	Slotted screw (rise up)	No
NX-ID6142-5	32 inputs	1 MIL connector	NPN/ PNP	A	XW2Z-□□□K	XW2K-40G-O32C	Push-In Plus	No
				A	XW2Z-□□□K	XW2K-40G-O32C-IN	Push-In Plus	Yes
				A	XW2Z-□□□K	XW2R-J34GD-C2	Phillips screw	No
				A	XW2Z-□□□K	XW2D-40G6	Phillips screw	No
				A	XW2Z-□□□K	XW2R-E34GD-C2	Slotted screw (rise up)	No
NX-ID6142-6	32 inputs	1 Fujitsu/ OTAX connector	NPN/ PNP	A	XW2Z-□□□B	XW2K-40G-O32A	Push-In Plus	No
				A	XW2Z-□□□B	XW2K-40G-O32A-IN	Push-In Plus	Yes
				A	XW2Z-□□□B	XW2R-J34GD-C1	Phillips screw	No
				A	XW2Z-□□□B	XW2D-40G6	Phillips screw	No
				A	XW2Z-□□□B	XW2R-E34GD-C1	Slotted screw (rise up)	No
NX-OD5121-5	16 outputs	1 MIL connector	NPN	A	XW2Z-□□□X	XW2K-20G-T	Push-In Plus	No
				A	XW2Z-□□□X-R	XW2K-20G-O16B-OUT	Push-In Plus	Yes
				A	XW2Z-□□□X	XW2D-20G6	Phillips screw	No
				A	XW2Z-□□□X	XW2R-E20GD-T	Slotted screw (rise up)	No
NX-OD5256-5	16 outputs	1 MIL connector	PNP	A	XW2Z-□□□X	XW2K-20G-T	Push-In Plus	No
				A	XW2Z-□□□X-R	XW2K-20G-O16B-OUT	Push-In Plus	Yes
				A	XW2Z-□□□X	XW2D-20G6	Phillips screw	No
				A	XW2Z-□□□X	XW2R-E20GD-T	Slotted screw (rise up)	No

Unit	I/O capacity	Number of connectors	Polarity	Connection pattern	Connecting Cable *	Connector-Terminal Block Conversion Unit	Wiring method	Common terminal
NX-OD6121-5	32 outputs	1 MIL connector	NPN	A	XW2Z-□□□K	XW2K-40G-O32C	Push-In Plus	No
				A	XW2Z-□□□K	XW2K-40G-O32C-OUT	Push-In Plus	Yes
				A	XW2Z-□□□K	XW2R-J34GD-C4	Phillips screw	No
				A	XW2Z-□□□K	XW2D-40G6	Phillips screw	No
				A	XW2Z-□□□K	XW2R-E34GD-C4	Slotted screw (rise up)	No
NX-OD6121-6	32 outputs	1 Fujitsu/OTAX connector	NPN	A	XW2Z-□□□B	XW2K-40G-O32B	Push-In Plus	No
				A	XW2Z-□□□B	XW2K-40G-O32B-OUT	Push-In Plus	Yes
				A	XW2Z-□□□B	XW2R-J34GD-C3	Phillips screw	No
				A	XW2Z-□□□B	XW2D-40G6	Phillips screw	No
				A	XW2Z-□□□B	XW2R-E34GD-C3	Slotted screw (rise up)	No
NX-OD6256-5	32 outputs	1 MIL connector	PNP	A	XW2Z-□□□K	XW2K-40G-O32C	Push-In Plus	No
				A	XW2Z-□□□K	XW2K-40G-O32C-OUT	Push-In Plus	Yes
				A	XW2Z-□□□K	XW2R-J34GD-C4	Phillips screw	No
				A	XW2Z-□□□K	XW2D-40G6	Phillips screw	No
				A	XW2Z-□□□K	XW2R-E34GD-C4	Slotted screw (rise up)	No
NX-MD6121-5	16 inputs	1 MIL connector	NPN/PNP	B	XW2Z-□□□X	XW2K-20G-T	Push-In Plus	No
				B	XW2Z-□□□X-R	XW2K-20G-O16A-IN	Push-In Plus	Yes
				B	XW2Z-□□□X	XW2D-20G6	Phillips screw	No
				B	XW2Z-□□□X	XW2R-E20GD-T	Slotted screw (rise up)	No
	16 outputs	1 MIL connector	NPN	B	XW2Z-□□□X	XW2K-20G-T	Push-In Plus	No
				B	XW2Z-□□□X-R	XW2K-20G-O16B-OUT	Push-In Plus	Yes
				B	XW2Z-□□□X	XW2D-20G6	Phillips screw	No
				B	XW2Z-□□□X	XW2R-E20GD-T	Slotted screw (rise up)	No
NX-MD6121-6	16 inputs	1 Fujitsu/OTAX connector	NPN/PNP	B	XW2Z-□□□A	XW2K-20G-T	Push-In Plus	No
				B	XW2Z-□□□A	XW2K-20G-O16A-IN	Push-In Plus	Yes
				B	XW2Z-□□□A	XW2D-20G6	Phillips screw	No
				B	XW2Z-□□□A	XW2R-E20GD-T	Slotted screw (rise up)	No
	16 outputs	1 Fujitsu/OTAX connector	NPN	B	XW2Z-□□□A	XW2K-20G-T	Push-In Plus	No
				B	XW2Z-□□□A	XW2K-20G-O16B-OUT	Push-In Plus	Yes
				B	XW2Z-□□□A	XW2D-20G6	Phillips screw	No
				B	XW2Z-□□□A	XW2R-E20GD-T	Slotted screw (rise up)	No
NX-MD6256-5	16 inputs	1 MIL connector	NPN/PNP	B	XW2Z-□□□X	XW2K-20G-T	Push-In Plus	No
				B	XW2Z-□□□X-R	XW2K-20G-O16A-IN	Push-In Plus	Yes
				B	XW2Z-□□□X	XW2D-20G6	Phillips screw	No
				B	XW2Z-□□□X	XW2R-E20GD-T	Slotted screw (rise up)	No
	16 outputs	1 MIL connector	NPN	B	XW2Z-□□□X	XW2K-20G-T	Push-In Plus	No
				B	XW2Z-□□□X-R	XW2K-20G-O16B-OUT	Push-In Plus	Yes
				B	XW2Z-□□□X	XW2D-20G6	Phillips screw	No
				B	XW2Z-□□□X	XW2R-E20GD-T	Slotted screw (rise up)	No

**Note:** For other models and specifications that are not listed above, refer to the *XW2K Series Datasheet* (Cat. No. G152), *XW2R Datasheet* and *XW2D Series Datasheet* for details.

\* □□□ in the model number indicates the cable length. Refer to the *XW2Z Datasheet* for details.

**Connection Patterns for I/O Relay Terminals**

Pattern	Configuration	Number of connectors	Branching
A	 <p>Connecting Cable I/O Relay Terminal I/O Relay Terminal</p>	1	2 branches
E	 <p>I/O Relay Terminal Connecting Cable I/O Relay Terminal</p>	2	None
F	 <p>Connecting Cable I/O Relay Terminal</p>	1	

**Connections to I/O Relay Terminals**

Unit	I/O capacity	Number of connectors	Polarity	Connection pattern	Number of branches	Connecting Cable *1	I/O Relay Terminal	Wiring method
NX-ID5142-5	16 inputs	1 MIL connector	NPN	F	None	XW2Z-RO□C	G7TC-ID16	Phillips screw
				F	None	XW2Z-RO□C	G7TC-IA16	Phillips screw
				F	None	XW2Z-RO□C	G70V-SID16P	Push-in spring
				F	None	XW2Z-RO□C	G70V-SID16P-C16	Push-in spring
			PNP	F	None	XW2Z-RO□C	G70V-SID16P-1	Push-in spring
				F	None	XW2Z-RO□C	G70V-SID16P-1-C16	Push-in spring
NX-ID6142-5	32 inputs	1 MIL connector	NPN	A	2	XW2Z-RO□□-D1	G7TC-ID16	Phillips screw
				A	2	XW2Z-RO□□-D1	G7TC-IA16	Phillips screw
				A	2	XW2Z-RO□□-D1	G70V-SID16P	Push-in spring
				A	2	XW2Z-RO□□-D1	G70V-SID16P-C16	Push-in spring
			PNP	A	2	XW2Z-RO□□-D1	G70V-SID16P-1	Push-in spring
				A	2	XW2Z-RO□□-D1	G70V-SID16P-1-C16	Push-in spring
NX-ID6142-6	32 inputs	1 Fujitsu/OTAX connector	NPN	A	2	XW2Z-RI□C-□	G7TC-ID16	Phillips screw
				A	2	XW2Z-RI□C-□	G7TC-IA16	Phillips screw
				A	2	XW2Z-RI□C-□	G70V-SID16P	Push-in spring
				A	2	XW2Z-RI□C-□	G70V-SID16P-C16	Push-in spring
			PNP	A	2	XW2Z-RI□C-□	G70V-SID16P-1	Push-in spring
				A	2	XW2Z-RI□C-□	G70V-SID16P-1-C16	Push-in spring
NX-OD5121-5	16 outputs	1 MIL connector	NPN	F	None	XW2Z-RO□C	G7TC-OC08	Phillips screw
				F	None	XW2Z-RO□C	G70D-SOC08	Phillips screw
				F	None	XW2Z-RO□C	G70R-SOC08 *2	Phillips screw
				F	None	XW2Z-RO□C	G7TC-OC16	Phillips screw
				F	None	XW2Z-RO□C	G70D-SOC16	Phillips screw
				F	None	XW2Z-RO□C	G70D-VSOC16	Phillips screw
				F	None	XW2Z-RO□C	G70D-FOM16	Phillips screw
				F	None	XW2Z-RO□C	G70D-VFOM16	Phillips screw
				F	None	XW2Z-RO□C	G70A-ZOC16-3	Phillips screw
				F	None	XW2Z-RO□C	G70V-SOC16P	Push-in spring

Unit	I/O capacity	Number of connectors	Polarity	Connection pattern	Number of branches	Connecting Cable *1	I/O Relay Terminal	Wiring method
NX-OD5256-5	16 outputs	1 MIL connector	PNP	F	None	XW2Z-RI□C	G7TC-OC16-1	Phillips screw
				F	None	XW2Z-RO□C	G70D-SOC16-1	Phillips screw
				F	None	XW2Z-RO□C	G70D-FOM16-1 *2	Phillips screw
				F	None	XW2Z-RO□C	G70A-ZOC16-4	Phillips screw
				F	None	XW2Z-RO□C	G70V-SOC16P-1	Push-in spring
				F	None	XW2Z-RO□C	G70V-SOC16P-1-C4	Push-in spring
NX-OD6121-5	32 outputs	1 MIL connector	NPN	A	2	XW2Z-RO□-□-D1	G7TC-OC16	Phillips screw
				A	2	XW2Z-RO□-□-D1	G7TC-OC08	Phillips screw
				A	2	XW2Z-RO□-□-D1	G70D-SOC16	Phillips screw
				A	2	XW2Z-RO□-□-D1	G70D-FOM16	Phillips screw
				A	2	XW2Z-RO□-□-D1	G70D-VSOC16	Phillips screw
				A	2	XW2Z-RO□-□-D1	G70D-VFOM16	Phillips screw
				A	2	XW2Z-RO□-□-D1	G70A-ZOC16-3 and Relay	Phillips screw
				A	2	XW2Z-RO□-□-D1	G70R-SOC08 *2	Phillips screw
				A	2	XW2Z-RO□-□-D1	G70D-SOC08	Phillips screw
				A	2	XW2Z-RO□-□-D1	G70V-SOC16P	Push-in spring
				A	2	XW2Z-RO□-□-D1	G70V-SOC16P-C4	Push-in spring
NX-OD6121-6	32 outputs	1 Fujitsu/OTAX connector	NPN	A	2	XW2Z-RO□C-□	G7TC-OC16	Phillips screw
				A	2	XW2Z-RO□C-□	G7TC-OC08	Phillips screw
				A	2	XW2Z-RO□C-□	G70D-SOC16	Phillips screw
				A	2	XW2Z-RO□C-□	G70D-FOM16	Phillips screw
				A	2	XW2Z-RO□C-□	G70D-VSOC16	Phillips screw
				A	2	XW2Z-RO□C-□	G70D-VFOM16	Phillips screw
				A	2	XW2Z-RO□C-□	G70A-ZOC16-3 and Relay	Phillips screw
				A	2	XW2Z-RO□C-□	G70R-SOC08 *2	Phillips screw
				A	2	XW2Z-RO□C-□	G70D-SOC08	Phillips screw
				A	2	XW2Z-RO□C-□	G70V-SOC16P	Push-in spring
				A	2	XW2Z-RO□C-□	G70V-SOC16P-C4	Push-in spring
NX-OD6256-5	32 outputs	1 MIL connector	PNP	A	2	XW2Z-RI□-□-D1	G7TC-OC16-1	Phillips screw
				A	2	XW2Z-RO□-□-D1	G70D-SOC16-1	Phillips screw
				A	2	XW2Z-RO□-□-D1	G70D-FOM16-1 *2	Phillips screw
				A	2	XW2Z-RO□-□-D1	G70A-ZOC16-4 and Relay	Phillips screw
NX-MD6121-5	16 inputs	1 MIL connector	NPN	E	None	XW2Z-RO□C	G7TC-ID16	Phillips screw
				E	None	XW2Z-RO□C	G7TC-IA16	Phillips screw
				E	None	XW2Z-RO□C	G70V-SID16P	Push-in spring
				E	None	XW2Z-RO□C	G70V-SID16P-C16	Push-in spring
	16 outputs	1 MIL connector	NPN	E	None	XW2Z-RO□C	G7TC-OC16	Phillips screw
				E	None	XW2Z-RO□C	G7TC-OC08	Phillips screw
				E	None	XW2Z-RO□C	G70D-SOC16	Phillips screw
				E	None	XW2Z-RO□C	G70D-FOM16	Phillips screw
				E	None	XW2Z-RO□C	G70D-VSOC16	Phillips screw
				E	None	XW2Z-RO□C	G70D-VFOM16	Phillips screw
				E	None	XW2Z-RO□C	G70A-ZOC16-3 and Relay	Phillips screw
				E	None	XW2Z-RO□C	G70R-SOC08 *2	Phillips screw
				E	None	XW2Z-RO□C	G70D-SOC08	Phillips screw
				E	None	XW2Z-RO□C	G70V-SOC16P	Push-in spring
				E	None	XW2Z-RO□C	G70V-SOC16P-C4	Push-in spring

# NX-ID/IA/OD/OC/MD

Unit	I/O capacity	Number of connectors	Polarity	Connection pattern	Number of branches	Connecting Cable *1	I/O Relay Terminal	Wiring method
NX-MD6121-6	16 inputs	1 Fujitsu/OTAX connector	NPN	E	None	XW2Z-R□C	G7TC-ID16	Phillips screw
				E	None	XW2Z-R□C	G7TC-IA16	Phillips screw
				E	None	XW2Z-R□C	G70V-SID16P	Push-in spring
				E	None	XW2Z-R□C	G70V-SID16P-C16	Push-in spring
	16 outputs	1 Fujitsu/OTAX connector	NPN	E	None	XW2Z-R□C	G7TC-OC16	Phillips screw
				E	None	XW2Z-R□C	G7TC-OC08	Phillips screw
				E	None	XW2Z-R□C	G70D-SOC16	Phillips screw
				E	None	XW2Z-R□C	G70D-FOM16	Phillips screw
				E	None	XW2Z-R□C	G70D-VSOC16	Phillips screw
				E	None	XW2Z-R□C	G70D-VFOM16	Phillips screw
				E	None	XW2Z-R□C	G70A-ZOC16-3 and Relay	Phillips screw
				E	None	XW2Z-R□C	G70R-SOC08 *2	Phillips screw
				E	None	XW2Z-R□C	G70D-SOC08	Phillips screw
				E	None	XW2Z-R□C	G70V-SOC16P	Push-in spring
				E	None	XW2Z-R□C	G70V-SOC16P-C4	Push-in spring
NX-MD6256-5	16 inputs	1 MIL connector	PNP	E	None	XW2Z-RO□C	G70V-SID16P-1	Push-in spring
				E	None	XW2Z-RO□C	G70V-SID16P-1-C16	Push-in spring
	16 outputs	1 MIL connector	PNP	E	None	XW2Z-RO□C	G7TC-OC16-1	Phillips screw
				E	None	XW2Z-RI□C	G70D-SOC16-1	Phillips screw
				E	None	XW2Z-RI□C	G70D-FOM16-1 *2	Phillips screw
				E	None	XW2Z-RI□C	G70A-ZOC16-4 and Relay	Phillips screw
				E	None	XW2Z-RI□C	G70V-SOC16P-1	Push-in spring
				E	None	XW2Z-RI□C	G70V-SOC16P-1-C4	Push-in spring

**Note:** 1. For other models and specifications that are not listed above, refer to the datasheets.

2. The G70V Series includes models that provide internal connections. Refer to the *G70V Datasheet* (Cat. No. J215) for details.

3. The G70A is a socket only. Mountable relays and timers are sold separately.

\*1. □ in the model number indicates the cable length. Refer to the *XW2Z-R Datasheet* (Cat. No. G126) for details.

\*2. Product no longer available to order.

## General Specifications

Item	Specification
<b>Enclosure</b>	Mounted in a panel
<b>Grounding method</b>	Ground to 100 Ω or less
<b>Operating environment</b>	Ambient operating temperature 0 to 55°C
	Ambient operating humidity 10% to 95% (with no condensation or icing)
	Atmosphere Must be free from corrosive gases.
	Ambient storage temperature -25 to 70°C (with no condensation or icing)
	Altitude 2,000 m max.
	Pollution degree 2 or less: Meets IEC 61010-2-201.
	Noise immunity 2 kV on power supply line (Conforms to IEC61000-4-4.)
	Overvoltage category Category II: Meets IEC 61010-2-201.
	EMC immunity level Zone B
	Vibration resistance *1 Conforms to IEC 60068-2-6. 5 to 8.4 Hz with 3.5-mm amplitude, 8.4 to 150 Hz, acceleration of 9.8 m/s <sup>2</sup> , 100 min each in X, Y, and Z directions (10 sweeps of 10 min each = 100 min total)
Shock resistance *1	Conforms to IEC 60068-2-27. 147 m/s <sup>2</sup> , 3 times each in X, Y, and Z directions
<b>Applicable standards *2</b>	cULus: Listed (UL508) or Listed (UL 61010-2-201), ANSI/ISA 12.12.01 or UL121201, EU: EN 61131-2 or EN 61010-2-201, C-Tick or RCM, KC: KC Registration, NK, LR

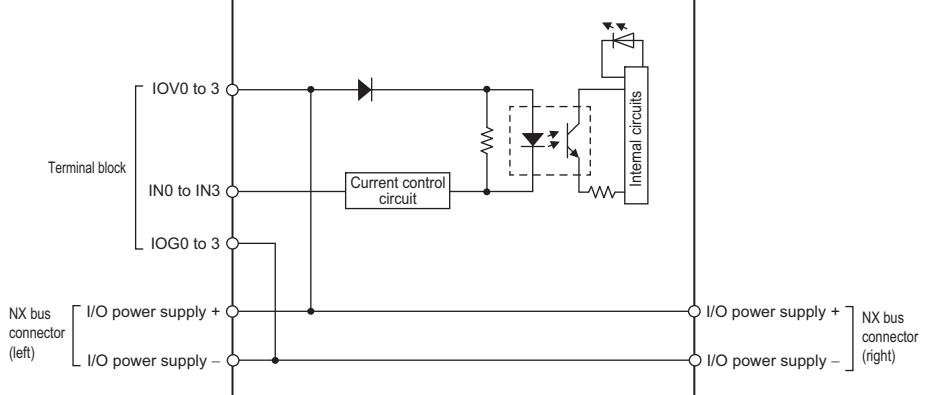
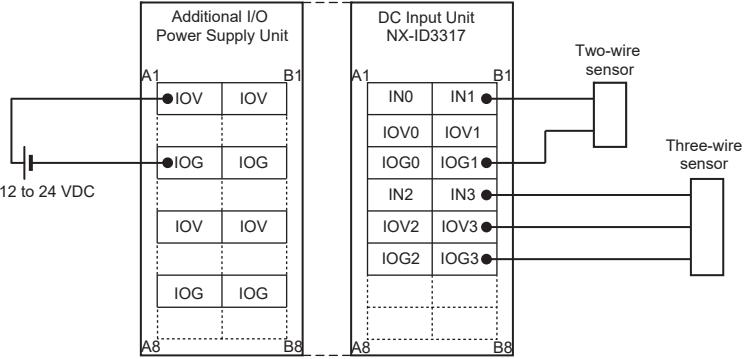
\*1. For the Relay Output Unit, refer to the Digital Input Unit Specifications.

\*2. Refer to the OMRON website (<http://www.ia.omron.com/>) or consult your OMRON representative for the most recent applicable standards for each model.

## Digital Input Unit Specifications

## ● DC Input Unit (Screwless Clamping Terminal Block, 12 mm Width)

## NX-ID3317

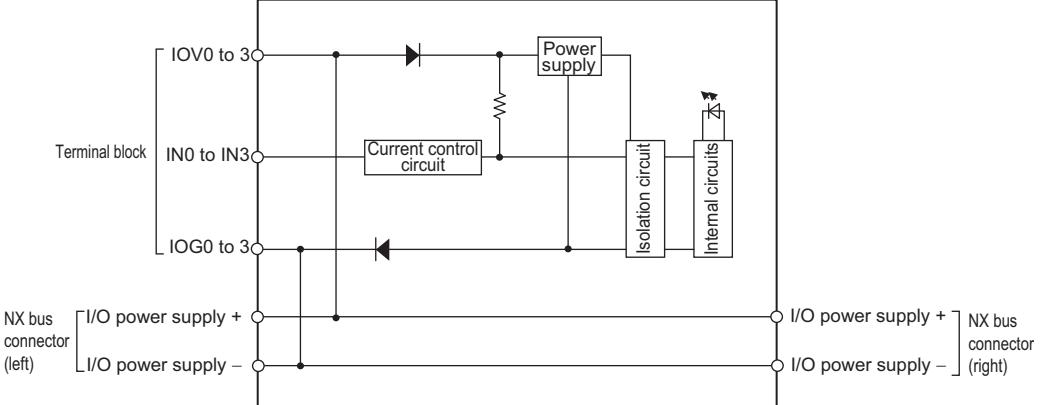
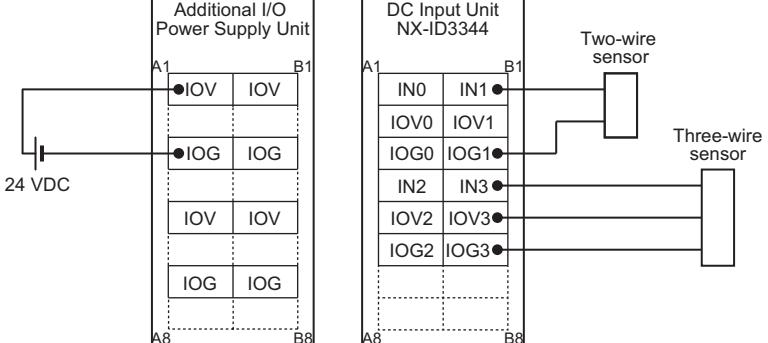
Unit name	DC Input Unit	Model	NX-ID3317		
Number of points	4 points	External connection terminals	Screwless clamping terminal block (12 terminals)		
I/O refreshing method	Selectable Synchronous I/O refreshing or Free-Run refreshing				
Indicators	TS indicator, input indicator 	Internal I/O common	NPN		
		Rated input voltage	12 to 24 VDC (9 to 28.8 VDC)		
		Input current	6 mA typical (at 24 VDC), rated current		
		ON voltage/ON current	9 VDC min./3 mA min. (between IOV and each signal)		
		OFF voltage/OFF current	2 VDC max./1 mA max. (between IOV and each signal)		
		ON/OFF response time	20 µs max./400 µs max.		
Dimensions	12 (W) x 100 (H) x 71 (D)	Input filter time	Without filter, 0.25 ms, 0.5 ms, 1 ms (factory setting), 2 ms, 4 ms, 8 ms, 16 ms, 32 ms, 64 ms, 128 ms, 256 ms		
		Isolation method	Photocoupler isolation		
Insulation resistance	20 MΩ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.		
I/O power supply method	Supply from the NX bus	Current capacity of I/O power supply terminal	IOV: 0.1 A/terminal max., IOG: 0.1 A/terminal max.		
NX Unit power consumption	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 0.90 W max.</li> <li>Connected to a Communications Coupler Unit 0.50 W max.</li> </ul>	Current consumption from I/O power supply	No consumption		
Weight	65 g max.				
Circuit layout					
Installation orientation and restrictions	Installation orientation: <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> Restrictions: No restrictions				
Terminal connection diagram					
Disconnection/Short-circuit detection	Not supported.	Protective function	Not supported.		

## NX-ID3343

<b>Unit name</b>	DC Input Unit	<b>Model</b>	NX-ID3343		
<b>Number of points</b>	4 points	<b>External connection terminals</b>	Screwless clamping terminal block (12 terminals)		
<b>I/O refreshing method</b>	Selectable Synchronous I/O refreshing or Free-Run refreshing				
<b>Indicators</b>	TS indicator, input indicator 	<b>Internal I/O common</b>	NPN		
		<b>Rated input voltage</b>	24 VDC (15 to 28.8 VDC)		
		<b>Input current</b>	3.5 mA typical (at 24 VDC), rated current		
		<b>ON voltage/ON current</b>	15 VDC min./3 mA min. (between IOV and each signal)		
		<b>OFF voltage/OFF current</b>	5 VDC max./1 mA max. (between IOV and each signal)		
		<b>ON/OFF response time</b>	100 ns max./100 ns max.		
		<b>Input filter time</b>	Without filter, 1 µs, 2 µs, 4 µs, 8 µs (factory setting), 16 µs, 32 µs, 64 µs, 128 µs, 256 µs		
<b>Dimensions</b>	12 (W) x 100 (H) x 71 (D)	<b>Isolation method</b>	Digital isolator isolation		
<b>Insulation resistance</b>	20 MΩ min. between isolated circuits (at 100 VDC)	<b>Dielectric strength</b>	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.		
<b>I/O power supply method</b>	Supply from the NX bus	<b>Current capacity of I/O power supply terminal</b>	IOV: 0.1 A/terminal max., IOG: 0.1 A/terminal max.		
<b>NX Unit power consumption</b>	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 0.90 W max.</li> <li>Connected to a Communications Coupler Unit 0.55 W max.</li> </ul>	<b>Current consumption from I/O power supply</b>	30 mA max.		
<b>Weight</b>	65 g max.				
<b>Circuit layout</b>					
<b>Installation orientation and restrictions</b>	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: No restrictions</p>				
<b>Terminal connection diagram</b>					
<b>Disconnection/Short-circuit detection</b>	Not supported.	<b>Protective function</b>	Not supported.		

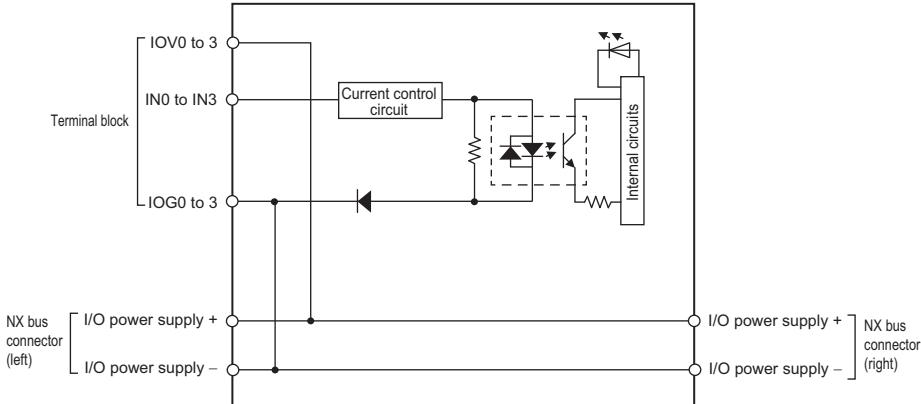
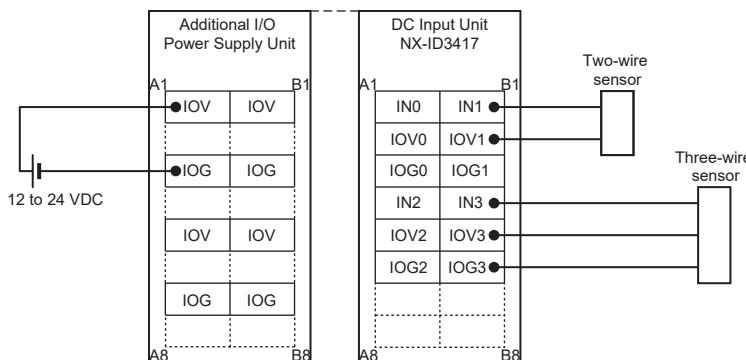
# NX-ID/IA/OD/OC/MD

## NX-ID3344

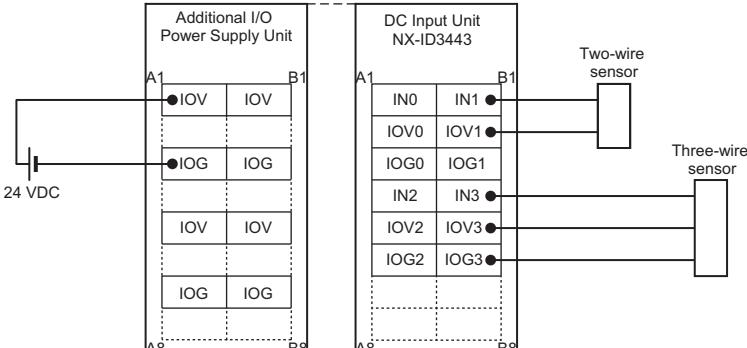
Unit name	DC Input Unit	Model	NX-ID3344
Number of points	4 points	External connection terminals	Screwless clamping terminal block (12 terminals)
I/O refreshing method	Input refreshing with input changed time		
Indicators	TS indicator, input indicators  	Internal I/O common Rated input voltage Input current ON voltage/ON current OFF voltage/OFF current ON/OFF response time Input filter time	NPN 24 VDC (15 to 28.8 VDC) 3.5 mA typical (at 24 VDC), rated current 15 VDC min./3 mA min. (between IOV and each signal) 5 VDC max./1 mA max. (between IOV and each signal) 100 ns max./100 ns max. No filter *
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Digital isolator isolation
Insulation resistance	20 MΩ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.
I/O power supply method	Supply from the NX bus	Current capacity of I/O power supply terminal	IOV: 0.1 A/terminal max., IOG: 0.1 A/terminal max.
NX Unit power consumption	• Connected to a CPU Unit 0.90 W max. • Connected to a Communications Coupler Unit 0.50 W max.	Current consumption from I/O power supply	30 mA max.
Weight	65 g max.		
Circuit layout			
Installation orientation and restrictions	<p>Installation orientation:        • Connected to a CPU Unit: Possible in upright installation.        • Connected to a Communications Coupler Unit: Possible in 6 orientations.        Restrictions: No restrictions</p>		
Terminal connection diagram			
Disconnection/Short-circuit detection	Not supported.	Protective function	Not supported.

\* This model does not support the input filter. If the Unit is susceptible to noise, take countermeasures such as separating or shielding the Unit and signal lines from the noise source. Refer to NX-series Digital I/O Unit User's Manual (W521) for information on countermeasures.

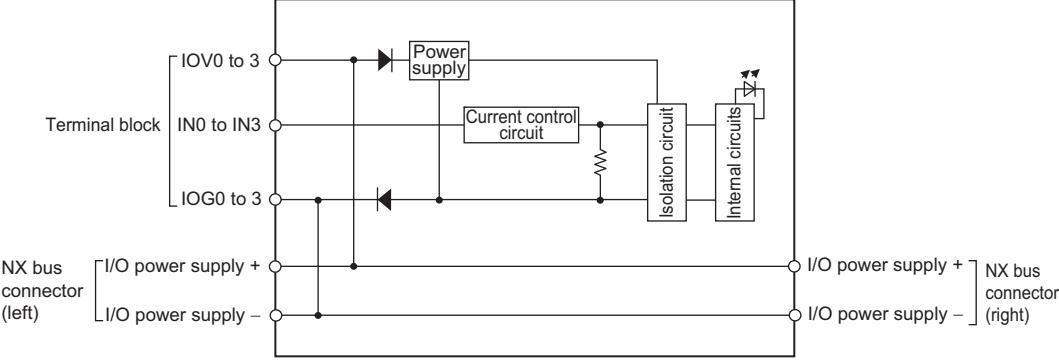
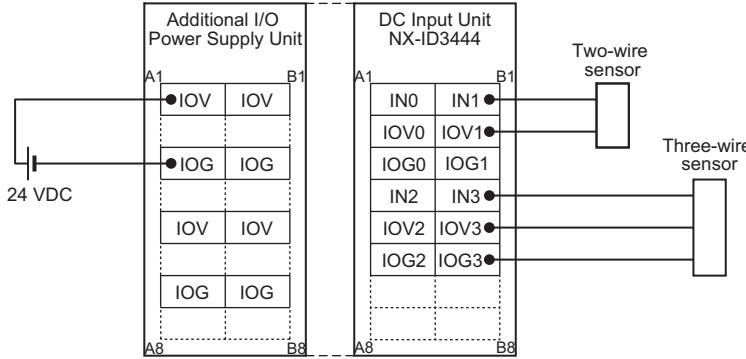
## NX-ID3417

<b>Unit name</b>	DC Input Unit	<b>Model</b>	NX-ID3417
<b>Number of points</b>	4 points	<b>External connection terminals</b>	Screwless clamping terminal block (12 terminals)
<b>I/O refreshing method</b>	Selectable Synchronous I/O refreshing or Free-Run refreshing		
<b>Indicators</b>	TS indicator, input indicator 	<b>Internal I/O common</b>	PNP
		<b>Rated input voltage</b>	12 to 24 VDC (9 to 28.8 VDC)
		<b>Input current</b>	6 mA typical (at 24 VDC), rated current
		<b>ON voltage/ON current</b>	9 VDC min./3 mA min. (between IOG and each signal)
		<b>OFF voltage/OFF current</b>	2 VDC max./1 mA max. (between IOG and each signal)
		<b>ON/OFF response time</b>	20 µs max./400 µs max.
		<b>Input filter time</b>	Without filter, 0.25 ms, 0.5 ms, 1 ms (factory setting), 2 ms, 4 ms, 8 ms, 16 ms, 32 ms, 64 ms, 128 ms, 256 ms
<b>Dimensions</b>	12 (W) x 100 (H) x 71 (D)	<b>Isolation method</b>	Photocoupler isolation
<b>Insulation resistance</b>	20 MΩ min. between isolated circuits (at 100 VDC)	<b>Dielectric strength</b>	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.
<b>I/O power supply method</b>	Supply from the NX bus	<b>Current capacity of I/O power supply terminal</b>	IOV: 0.1 A/terminal max., IOG: 0.1 A/terminal max.
<b>NX Unit power consumption</b>	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 0.90 W max.</li> <li>Connected to a Communications Coupler Unit 0.50 W max.</li> </ul>	<b>Current consumption from I/O power supply</b>	No consumption
<b>Weight</b>	65 g max.		
<b>Circuit layout</b>			
<b>Installation orientation and restrictions</b>	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: No restrictions</p>		
<b>Terminal connection diagram</b>			
<b>Disconnection/Short-circuit detection</b>	Not supported.	<b>Protective function</b>	Not supported.

## NX-ID3443

<b>Unit name</b>	DC Input Unit	<b>Model</b>	NX-ID3443
<b>Number of points</b>	4 points	<b>External connection terminals</b>	Screwless clamping terminal block (12 terminals)
<b>I/O refreshing method</b>	Selectable Synchronous I/O refreshing or Free-Run refreshing		
<b>Indicators</b>	TS indicator, input indicator 	<b>Internal I/O common</b>	PNP
		<b>Rated input voltage</b>	24 VDC (15 to 28.8 VDC)
		<b>Input current</b>	3.5 mA typical (at 24 VDC), rated current
		<b>ON voltage/ON current</b>	15 VDC min./3 mA min. (between IOG and each signal)
		<b>OFF voltage/OFF current</b>	5 VDC max./1 mA max. (between IOG and each signal)
		<b>ON/OFF response time</b>	100 ns max./100 ns max.
		<b>Input filter time</b>	Without filter, 1 µs, 2 µs, 4 µs, 8 µs (factory setting), 16 µs, 32 µs, 64 µs, 128 µs, 256 µs
<b>Dimensions</b>	12 (W) x 100 (H) x 71 (D)	<b>Isolation method</b>	Digital isolator isolation
<b>Insulation resistance</b>	20 MΩ min. between isolated circuits (at 100 VDC)	<b>Dielectric strength</b>	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.
<b>I/O power supply method</b>	Supply from the NX bus	<b>Current capacity of I/O power supply terminal</b>	IOV: 0.1 A/terminal max., IOG: 0.1 A/terminal max.
<b>NX Unit power consumption</b>	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 0.90 W max.</li> <li>Connected to a Communications Coupler Unit 0.55 W max.</li> </ul>	<b>Current consumption from I/O power supply</b>	30 mA max.
<b>Weight</b>	65 g max.		
<b>Circuit layout</b>			
<b>Installation orientation and restrictions</b>	Installation orientation: <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> Restrictions: No restrictions		
<b>Terminal connection diagram</b>			
<b>Disconnection/Short-circuit detection</b>	Not supported.	<b>Protective function</b>	Not supported.

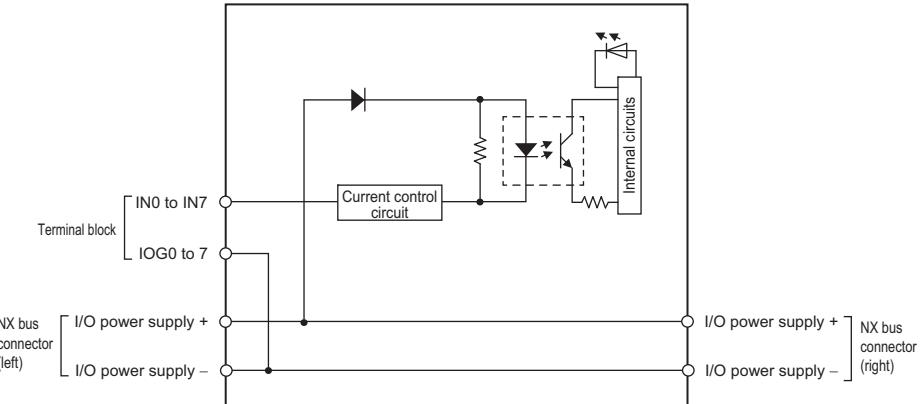
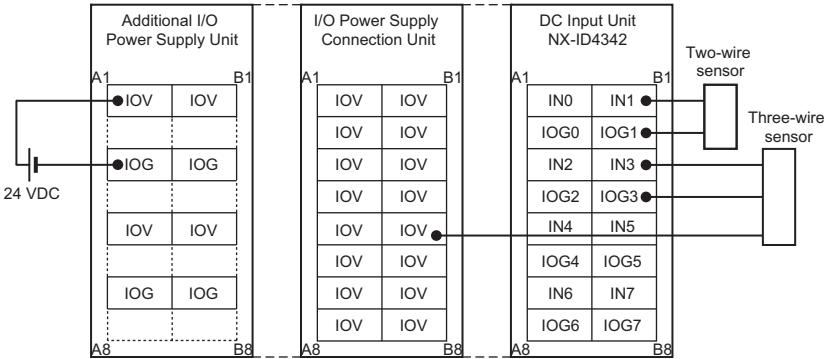
## NX-ID3444

<b>Unit name</b>	DC Input Unit	<b>Model</b>	NX-ID3444		
<b>Number of points</b>	4 points	<b>External connection terminals</b>	Screwless clamping terminal block (12 terminals)		
<b>I/O refreshing method</b>	Input refreshing with input changed time				
<b>Indicators</b>	TS indicator, input indicators 		<b>Internal I/O common</b> PNP <b>Rated input voltage</b> 24 VDC (15 to 28.8 VDC) <b>Input current</b> 3.5 mA typical (at 24 VDC), rated current <b>ON voltage/ON current</b> 15 VDC min./3 mA min. (between IOG and each signal) <b>OFF voltage/OFF current</b> 5 VDC max./1 mA max. (between IOG and each signal) <b>ON/OFF response time</b> 100 ns max./100 ns max. <b>Input filter time</b> No filter*		
<b>Dimensions</b>	12 (W) x 100 (H) x 71 (D)	<b>Isolation method</b>	Digital isolator isolation		
<b>Insulation resistance</b>	20 MΩ min. between isolated circuits (at 100 VDC)	<b>Dielectric strength</b>	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.		
<b>I/O power supply method</b>	Supply from the NX bus	<b>Current capacity of I/O power supply terminal</b>	IOV: 0.1 A/terminal max., IOG: 0.1 A/terminal max.		
<b>NX Unit power consumption</b>	• Connected to a CPU Unit 0.90 W max. • Connected to a Communications Coupler Unit 0.50 W max.	<b>Current consumption from I/O power supply</b>	30 mA max.		
<b>Weight</b>	65 g max.				
<b>Circuit layout</b>					
<b>Installation orientation and restrictions</b>	<p>Installation orientation:        • Connected to a CPU Unit: Possible in upright installation.        • Connected to a Communications Coupler Unit: Possible in 6 orientations.</p> <p>Restrictions: No restrictions</p>				
<b>Terminal connection diagram</b>					
<b>Disconnection/Short-circuit detection</b>	Not supported.	<b>Protective function</b>	Not supported.		

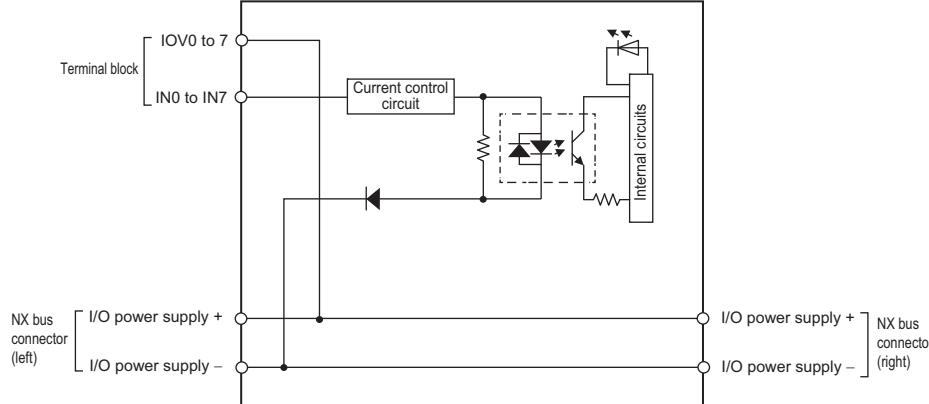
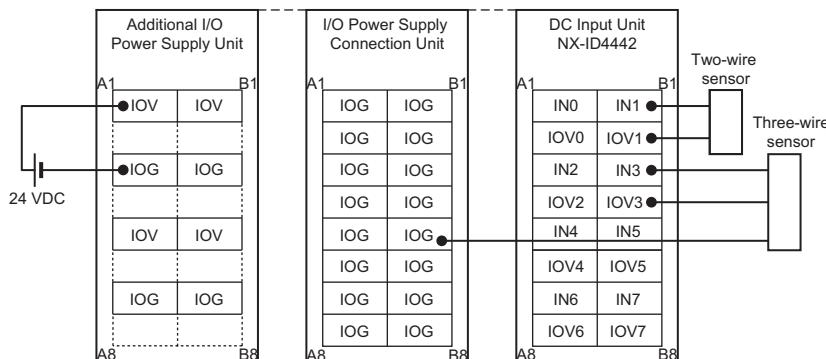
\* This model does not support the input filter. If the Unit is susceptible to noise, take countermeasures such as separating or shielding the Unit and signal lines from the noise source. Refer to NX-series Digital I/O Unit User's Manual (W521) for information on countermeasures.

# NX-ID/IA/OD/OC/MD

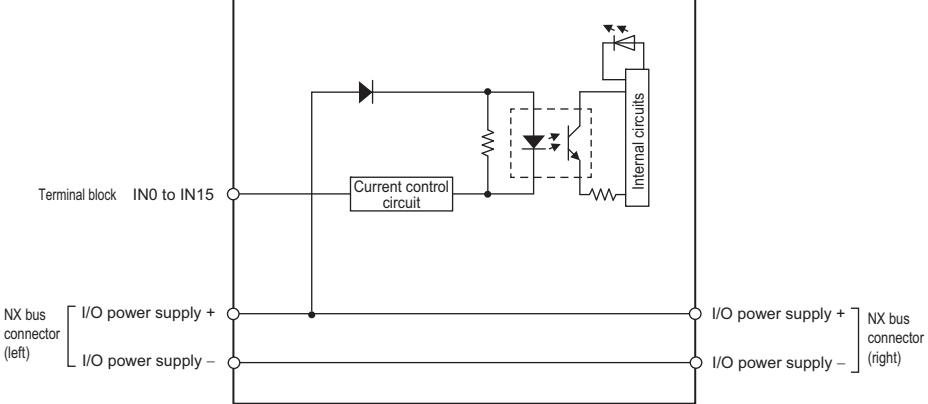
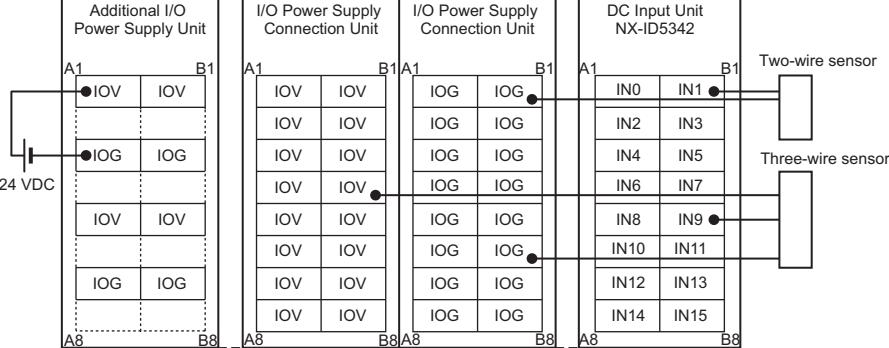
## NX-ID4342

<b>Unit name</b>	DC Input Unit	<b>Model</b>	NX-ID4342		
<b>Number of points</b>	8 points	<b>External connection terminals</b>	Screwless clamping terminal block (16 terminals)		
<b>I/O refreshing method</b>	Selectable Synchronous I/O refreshing or Free-Run refreshing				
<b>Indicators</b>	TS indicator, input indicator 	<b>Internal I/O common</b>	NPN		
		<b>Rated input voltage</b>	24 VDC (15 to 28.8 VDC)		
		<b>Input current</b>	3.5 mA typical (at 24 VDC), rated current		
		<b>ON voltage/ON current</b>	15 VDC min./3 mA min. (between IOG and each signal)		
		<b>OFF voltage/OFF current</b>	5 VDC max./1 mA max. (between IOG and each signal)		
		<b>ON/OFF response time</b>	20 µs max./400 µs max.		
<b>Dimensions</b>	12 (W) x 100 (H) x 71 (D)	<b>Input filter time</b>	Without filter, 0.25 ms, 0.5 ms, 1 ms (factory setting), 2 ms, 4 ms, 8 ms, 16 ms, 32 ms, 64 ms, 128 ms, 256 ms		
		<b>Isolation method</b>	Photocoupler isolation		
<b>Insulation resistance</b>	20 MΩ min. between isolated circuits (at 100 VDC)	<b>Dielectric strength</b>	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.		
<b>I/O power supply method</b>	Supply from the NX bus	<b>Current capacity of I/O power supply terminal</b>	IOG: 0.1 A/terminal max.		
<b>NX Unit power consumption</b>	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 0.90 W max.</li> <li>Connected to a Communications Coupler Unit 0.50 W max.</li> </ul>	<b>Current consumption from I/O power supply</b>	No consumption		
<b>Weight</b>	65 g max.				
<b>Circuit layout</b>					
<b>Installation orientation and restrictions</b>	Installation orientation: <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> Restrictions: No restrictions				
<b>Terminal connection diagram</b>					
<b>Disconnection/Short-circuit detection</b>	Not supported.	<b>Protective function</b>	Not supported.		

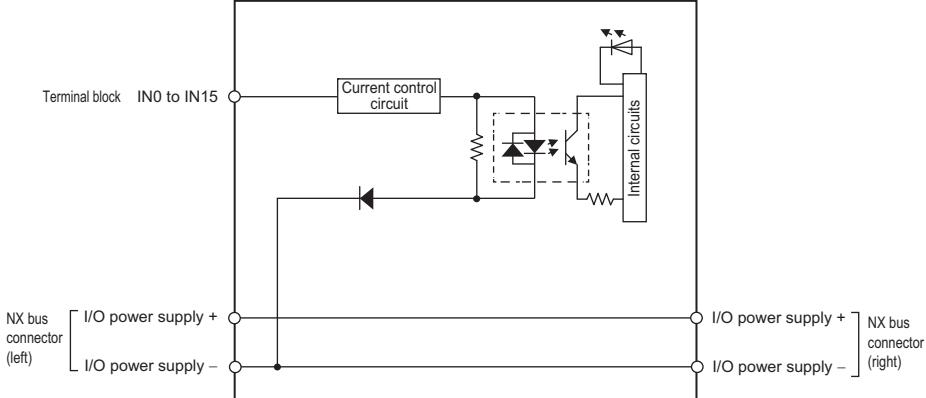
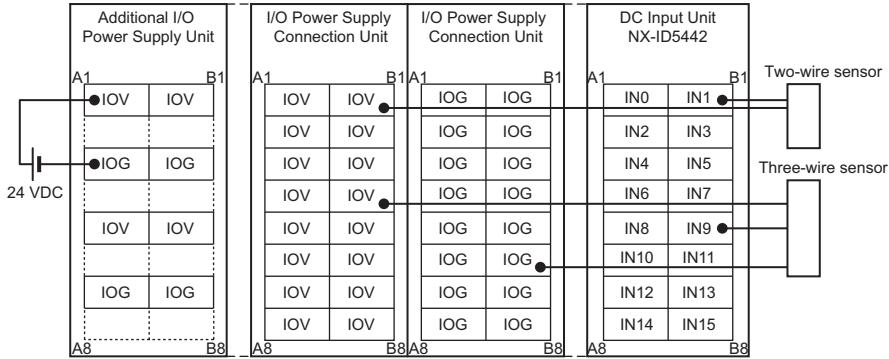
## NX-ID4442

<b>Unit name</b>	DC Input Unit	<b>Model</b>	NX-ID4442
<b>Number of points</b>	8 points	<b>External connection terminals</b>	Screwless clamping terminal block (16 terminals)
<b>I/O refreshing method</b>	Selectable Synchronous I/O refreshing or Free-Run refreshing		
<b>Indicators</b>	TS indicator, input indicator 	<b>Internal I/O common</b>	PNP
		<b>Rated input voltage</b>	24 VDC (15 to 28.8 VDC)
		<b>Input current</b>	3.5 mA typical (at 24 VDC), rated current
		<b>ON voltage/ON current</b>	15 VDC min./3 mA min. (between IOG and each signal)
		<b>OFF voltage/OFF current</b>	5 VDC max./1 mA max. (between IOG and each signal)
		<b>ON/OFF response time</b>	20 $\mu$ s max./400 $\mu$ s max.
		<b>Input filter time</b>	Without filter, 0.25 ms, 0.5 ms, 1 ms (factory setting), 2 ms, 4 ms, 8 ms, 16 ms, 32 ms, 64 ms, 128 ms, 256 ms
<b>Dimensions</b>	12 (W) x 100 (H) x 71 (D)	<b>Isolation method</b>	Photocoupler isolation
<b>Insulation resistance</b>	20 M $\Omega$ min. between isolated circuits (at 100 VDC)	<b>Dielectric strength</b>	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.
<b>I/O power supply method</b>	Supply from the NX bus	<b>Current capacity of I/O power supply terminal</b>	IOV: 0.1 A/terminal max.
<b>NX Unit power consumption</b>	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 0.90 W max.</li> <li>Connected to a Communications Coupler Unit 0.50 W max.</li> </ul>	<b>Current consumption from I/O power supply</b>	No consumption
<b>Weight</b>	65 g max.		
<b>Circuit layout</b>			
<b>Installation orientation and restrictions</b>	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: No restrictions</p>		
<b>Terminal connection diagram</b>			
<b>Disconnection/Short-circuit detection</b>	Not supported.	<b>Protective function</b>	Not supported.

## NX-ID5342

<b>Unit name</b>	DC Input Unit	<b>Model</b>	NX-ID5342		
<b>Number of points</b>	16 points	<b>External connection terminals</b>	Screwless clamping terminal block (16 terminals)		
<b>I/O refreshing method</b>	Selectable Synchronous I/O refreshing or Free-Run refreshing				
<b>Indicators</b>	TS indicator, input indicator 	<b>Internal I/O common</b>	NPN		
		<b>Rated input voltage</b>	24 VDC (15 to 28.8 VDC)		
		<b>Input current</b>	2.5 mA typical (at 24 VDC), rated current		
		<b>ON voltage/ON current</b>	15 VDC min./2 mA min. (between IOG and each signal)		
		<b>OFF voltage/OFF current</b>	5 VDC max./0.5 mA max. (between IOG and each signal)		
		<b>ON/OFF response time</b>	20 µs max./400 µs max.		
<b>Dimensions</b>	12 (W) x 100 (H) x 71 (D)	<b>Input filter time</b>	Without filter, 0.25 ms, 0.5 ms, 1 ms (factory setting), 2 ms, 4 ms, 8 ms, 16 ms, 32 ms, 64 ms, 128 ms, 256 ms		
		<b>Isolation method</b>	Photocoupler isolation		
		<b>Dielectric strength</b>	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.		
		<b>Current capacity of I/O power supply terminal</b>	Without I/O power supply terminals		
<b>NX Unit power consumption</b>	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 0.90 W max.</li> <li>Connected to a Communications Coupler Unit 0.55 W max.</li> </ul>	<b>Current consumption from I/O power supply</b>	No consumption		
<b>Weight</b>	65 g max.				
<b>Circuit layout</b>					
<b>Installation orientation and restrictions</b>	Installation orientation: <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> Restrictions: No restrictions				
<b>Terminal connection diagram</b>					
<b>Disconnection/Short-circuit detection</b>	Not supported.	<b>Protective function</b>	Not supported.		

## NX-ID5442

<b>Unit name</b>	DC Input Unit	<b>Model</b>	NX-ID5442
<b>Number of points</b>	16 points	<b>External connection terminals</b>	Screwless clamping terminal block (16 terminals)
<b>I/O refreshing method</b>	Selectable Synchronous I/O refreshing or Free-Run refreshing		
<b>Indicators</b>	TS indicator, input indicator 	<b>Internal I/O common</b>	PNP
		<b>Rated input voltage</b>	24 VDC (15 to 28.8 VDC)
		<b>Input current</b>	2.5 mA typical (at 24 VDC), rated current
		<b>ON voltage/ON current</b>	15 VDC min./2 mA min. (between IOG and each signal)
		<b>OFF voltage/OFF current</b>	5 VDC max./0.5 mA max. (between IOG and each signal)
		<b>ON/OFF response time</b>	20 µs max./400 µs max.
		<b>Input filter time</b>	Without filter, 0.25 ms, 0.5 ms, 1 ms (factory setting), 2 ms, 4 ms, 8 ms, 16 ms, 32 ms, 64 ms, 128 ms, 256 ms
<b>Dimensions</b>	12 (W) x 100 (H) x 71 (D)	<b>Isolation method</b>	Photocoupler isolation
<b>Insulation resistance</b>	20 MΩ min. between isolated circuits (at 100 VDC)	<b>Dielectric strength</b>	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.
<b>I/O power supply method</b>	Supply from the NX bus	<b>Current capacity of I/O power supply terminal</b>	Without I/O power supply terminals
<b>NX Unit power consumption</b>	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 0.90 W max.</li> <li>Connected to a Communications Coupler Unit 0.55 W max.</li> </ul>	<b>Current consumption from I/O power supply</b>	No consumption
<b>Weight</b>	65 g max.		
<b>Circuit layout</b>			
<b>Installation orientation and restrictions</b>	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: No restrictions</p>		
<b>Terminal connection diagram</b>			
<b>Disconnection/Short-circuit detection</b>	Not supported.	<b>Protective function</b>	Not supported.

## NX-ID6342

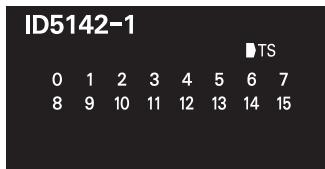
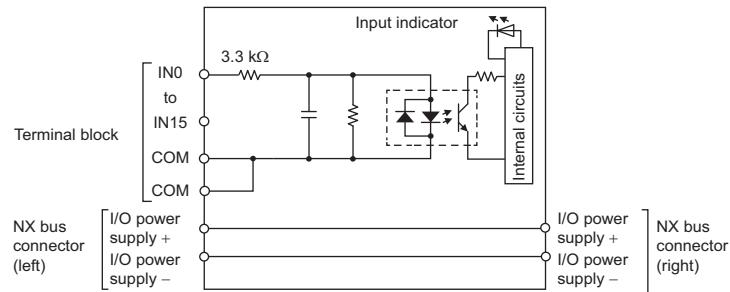
<b>Unit name</b>	DC Input Unit	<b>Model</b>	NX-ID6342
<b>Number of points</b>	32 points	<b>External connection terminals</b>	Screwless clamping terminal block (16 terminals x 2)
<b>I/O refreshing method</b>	Selectable Synchronous I/O refreshing or Free-Run refreshing		
<b>Indicators</b>	TS indicator, input indicator <b>ID6342</b> ■ TS 0 1 2 3 16 17 18 19 4 5 6 7 20 21 22 23 8 9 10 11 24 25 26 27 12 13 14 15 28 29 30 31	<b>Internal I/O common</b>	NPN
		<b>Rated input voltage</b>	24 VDC (15 to 28.8 VDC)
		<b>Input current</b>	2.5 mA typical (at 24 VDC), rated current
		<b>ON voltage/ON current</b>	15 VDC min./2 mA min. (between IOG and each signal)
		<b>OFF voltage/OFF current</b>	5 VDC max./0.5 mA max. (between IOG and each signal)
		<b>ON/OFF response time</b>	20 µs max./400 µs max.
		<b>Input filter time</b>	Without filter, 0.25 ms, 0.5 ms, 1 ms (factory setting), 2 ms, 4 ms, 8 ms, 16 ms, 32 ms, 64 ms, 128 ms, 256 ms
<b>Dimensions</b>	24 (W) x 100 (H) x 71 (D)	<b>Isolation method</b>	Photocoupler isolation
<b>Insulation resistance</b>	20 MΩ min. between isolated circuits (at 100 VDC)	<b>Dielectric strength</b>	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.
<b>I/O power supply method</b>	Supply from the NX bus	<b>Current capacity of I/O power supply terminal</b>	Without I/O power supply terminals
<b>NX Unit power consumption</b>	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 1.45 W max.</li> <li>Connected to a Communications Coupler Unit 0.70 W max.</li> </ul>	<b>Current consumption from I/O power supply</b>	No consumption
<b>Weight</b>	130 g max.		
<b>Circuit layout</b>			
<b>Installation orientation and restrictions</b>	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: No restrictions</p>		
<b>Terminal connection diagram</b>			
<b>Disconnection/Short-circuit detection</b>	Not supported.	<b>Protective function</b>	Not supported.

## NX-ID6442

<b>Unit name</b>	DC Input Unit	<b>Model</b>	NX-ID6442																																
<b>Number of points</b>	32 points	<b>External connection terminals</b>	Screwless clamping terminal block (16 terminals x 2)																																
<b>I/O refreshing method</b>	Selectable Synchronous I/O refreshing or Free-Run refreshing																																		
<b>Indicators</b>	<p>TS indicator, input indicator</p> <p><b>ID6442</b></p> <p>■ TS</p> <table border="1"> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>16</td><td>17</td><td>18</td><td>19</td></tr> <tr><td>4</td><td>5</td><td>6</td><td>7</td><td>20</td><td>21</td><td>22</td><td>23</td></tr> <tr><td>8</td><td>9</td><td>10</td><td>11</td><td>24</td><td>25</td><td>26</td><td>27</td></tr> <tr><td>12</td><td>13</td><td>14</td><td>15</td><td>28</td><td>29</td><td>30</td><td>31</td></tr> </table>	0	1	2	3	16	17	18	19	4	5	6	7	20	21	22	23	8	9	10	11	24	25	26	27	12	13	14	15	28	29	30	31	<b>Internal I/O common</b>	PNP
0	1	2	3	16	17	18	19																												
4	5	6	7	20	21	22	23																												
8	9	10	11	24	25	26	27																												
12	13	14	15	28	29	30	31																												
<b>Rated input voltage</b>	24 VDC (15 to 28.8 VDC)																																		
<b>Input current</b>	2.5 mA typical (at 24 VDC), rated current																																		
<b>ON voltage/ON current</b>	15 VDC min./2 mA min. (between IOG and each signal)																																		
<b>OFF voltage/OFF current</b>	5 VDC max./0.5 mA max. (between IOG and each signal)																																		
<b>ON/OFF response time</b>	20 $\mu$ s max./400 $\mu$ s max.																																		
<b>Input filter time</b>	Without filter, 0.25 ms, 0.5 ms, 1 ms (factory setting), 2 ms, 4 ms, 8 ms, 16 ms, 32 ms, 64 ms, 128 ms, 256 ms																																		
<b>Dimensions</b>	24 (W) x 100 (H) x 71 (D)	<b>Isolation method</b>	Photocoupler isolation																																
<b>Insulation resistance</b>	20 M $\Omega$ min. between isolated circuits (at 100 VDC)	<b>Dielectric strength</b>	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.																																
<b>I/O power supply method</b>	Supply from the NX bus	<b>Current capacity of I/O power supply terminal</b>	Without I/O power supply terminals																																
<b>NX Unit power consumption</b>	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 1.45 W max.</li> <li>Connected to a Communications Coupler Unit 0.70 W max.</li> </ul>	<b>Current consumption from I/O power supply</b>	No consumption																																
<b>Weight</b>	130 g max.																																		
<b>Circuit layout</b>																																			
<b>Installation orientation and restrictions</b>	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: No restrictions</p>																																		
<b>Terminal connection diagram</b>																																			
<b>Disconnection/Short-circuit detection</b>	Not supported.	<b>Protective function</b>	Not supported.																																

## ● DC Input Unit (M3 Screw Terminal Block, 30 mm Width)

## NX-ID5142-1

Unit name	DC Input Unit	Model	NX-ID5142-1
Number of points	16 points	External connection terminals	M3 screw terminal block (18 terminals)
I/O refreshing method	Switching Synchronous I/O refreshing and Free-Run refreshing		
Indicators	<p>TS indicator, input indicators</p> 	Internal I/O common	For both NPN/PNP
		Rated input voltage	24 VDC (15 to 28.8 VDC)
		Input current	7 mA typical (at 24 VDC)
		ON voltage/ON current	15 VDC min./3 mA min. (between COM and each signal)
		OFF voltage/OFF current	5 VDC max./1 mA max. (between COM and each signal)
		ON/OFF response time	20 µs max./400 µs max.
		Input filter time	No filter, 0.25 ms, 0.5 ms, 1 ms (default), 2 ms, 4 ms, 8 ms, 16 ms, 32 ms, 64 ms, 128 ms, 256 ms
Dimensions	30 (W) x 100 (H) x 71 (D)	Isolation method	Photocoupler isolation
Insulation resistance	20 MΩ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.
I/O power supply method	Supply from external source	Current capacity of I/O power supply terminal	Without I/O power supply terminals
NX Unit power consumption	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 0.85 W max.</li> <li>Connected to a Communications Coupler Unit 0.55 W max.</li> </ul>	Current consumption from I/O power supply	No consumption
Weight	125 g max.		
Circuit layout			

<b>Installation orientation and restrictions</b>	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: As shown in the following.</p> <ul style="list-style-type: none"> <li>For upright installation</li> </ul> <p>Number of simultaneously ON input points vs. Ambient temperature characteristic</p> <table border="1"> <caption>Number of simultaneously ON input points vs. Ambient temperature characteristic (Upright)</caption> <thead> <tr> <th>Ambient temperature (°C)</th> <th>28.8 V (points)</th> <th>24 V (points)</th> </tr> </thead> <tbody> <tr> <td>45</td> <td>16</td> <td>16</td> </tr> <tr> <td>55</td> <td>12</td> <td>16</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>For any installation other than upright</li> </ul> <p>Number of simultaneously ON input points vs. Ambient temperature characteristic</p> <table border="1"> <caption>Number of simultaneously ON input points vs. Ambient temperature characteristic (Non-upright)</caption> <thead> <tr> <th>Ambient temperature (°C)</th> <th>28.8 V (points)</th> <th>24 V (points)</th> </tr> </thead> <tbody> <tr> <td>40</td> <td>16</td> <td>16</td> </tr> <tr> <td>45</td> <td>16</td> <td>16</td> </tr> <tr> <td>55</td> <td>12</td> <td>7</td> </tr> </tbody> </table>	Ambient temperature (°C)	28.8 V (points)	24 V (points)	45	16	16	55	12	16	Ambient temperature (°C)	28.8 V (points)	24 V (points)	40	16	16	45	16	16	55	12	7
Ambient temperature (°C)	28.8 V (points)	24 V (points)																				
45	16	16																				
55	12	16																				
Ambient temperature (°C)	28.8 V (points)	24 V (points)																				
40	16	16																				
45	16	16																				
55	12	7																				
<b>Terminal connection diagram</b>																						
<b>Disconnection/Short-circuit detection</b>	Not supported.	<b>Protective function</b>	Not supported.																			

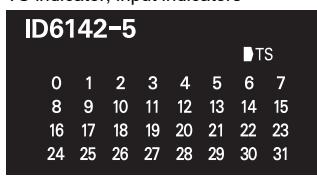
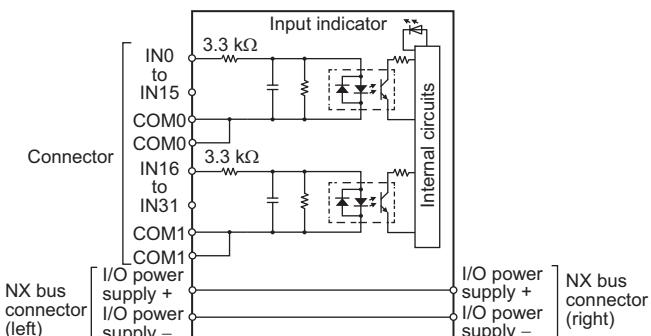
## ● DC Input Unit (MIL Connector, 30 mm Width)

### NX-ID5142-5

Unit name	DC Input Unit	Model	NX-ID5142-5
Number of points	16 points	External connection terminals	MIL connector (20 terminals)
I/O refreshing method	Switching Synchronous I/O refreshing and Free-Run refreshing		
Indicators	<p>TS indicator, input indicators</p> <p><b>ID5142-5</b></p> <p>TS</p> <p>0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15</p>	Internal I/O common	For both NPN/PNP
		Rated input voltage	24 VDC (15 to 28.8 VDC)
		Input current	7 mA typical (at 24 VDC)
		ON voltage/ON current	15 VDC min./3 mA min. (between COM and each signal)
		OFF voltage/OFF current	5 VDC max./1 mA max. (between COM and each signal)
		ON/OFF response time	20 $\mu$ s max./400 $\mu$ s max.
		Input filter time	No filter, 0.25 ms, 0.5 ms, 1 ms (default), 2 ms, 4 ms, 8 ms, 16 ms, 32 ms, 64 ms, 128 ms, 256 ms
Dimensions	30 (W) x 100 (H) x 71 (D)	Isolation method	Photocoupler isolation
Insulation resistance	20 M $\Omega$ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.
I/O power supply method	Supply from external source	Current capacity of I/O power supply terminal	Without I/O power supply terminals
NX Unit power consumption	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 0.85 W max.</li> <li>Connected to a Communications Coupler Unit 0.55 W max.</li> </ul>	Current consumption from I/O power supply	No consumption
Weight	85 g max.		
Circuit layout			

<b>Installation orientation and restrictions</b>	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: As shown in the following.</p> <ul style="list-style-type: none"> <li>For upright installation</li> </ul> <p>Number of simultaneously ON input points vs. Ambient temperature characteristic</p> <table border="1"> <caption>Number of simultaneously ON input points vs. Ambient temperature (Upright)</caption> <thead> <tr> <th>Ambient temperature (°C)</th> <th>28.8 V (points)</th> <th>24 V (points)</th> </tr> </thead> <tbody> <tr><td>0</td><td>16</td><td>16</td></tr> <tr><td>45</td><td>16</td><td>16</td></tr> <tr><td>50</td><td>12</td><td>12</td></tr> <tr><td>55</td><td>12</td><td>7</td></tr> </tbody> </table> <ul style="list-style-type: none"> <li>For any installation other than upright</li> </ul> <p>Number of simultaneously ON input points vs. Ambient temperature characteristic</p> <table border="1"> <caption>Number of simultaneously ON input points vs. Ambient temperature (Non-upright)</caption> <thead> <tr> <th>Ambient temperature (°C)</th> <th>28.8 V (points)</th> <th>24 V (points)</th> </tr> </thead> <tbody> <tr><td>0</td><td>16</td><td>16</td></tr> <tr><td>45</td><td>16</td><td>16</td></tr> <tr><td>50</td><td>12</td><td>12</td></tr> <tr><td>55</td><td>12</td><td>7</td></tr> </tbody> </table>	Ambient temperature (°C)	28.8 V (points)	24 V (points)	0	16	16	45	16	16	50	12	12	55	12	7	Ambient temperature (°C)	28.8 V (points)	24 V (points)	0	16	16	45	16	16	50	12	12	55	12	7
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<b>Disconnection/Short-circuit detection</b>	Not supported.																														
<b>Protective function</b>	Not supported.																														

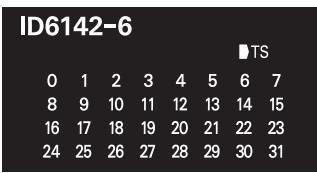
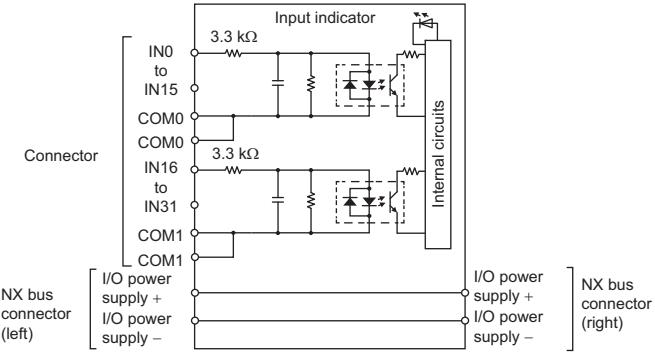
## NX-ID6142-5

Unit name	DC Input Unit	Model	NX-ID6142-5
Number of points	32 points	External connection terminals	MIL connector (40 terminals)
I/O refreshing method	Switching Synchronous I/O refreshing and Free-Run refreshing		
Indicators	TS indicator, input indicators 	Internal I/O common Rated input voltage Input current ON voltage/ON current OFF voltage/OFF current ON/OFF response time Input filter time	For both NPN/PNP 24 VDC (19 to 28.8 VDC) 4.1 mA typical (24 VDC) 19 VDC min./3 mA min. (between COM and each signal) 5 VDC max./1 mA max. (between COM and each signal) 20 $\mu$ s max./400 $\mu$ s max. No filter, 0.25 ms, 0.5 ms, 1 ms (default), 2 ms, 4 ms, 8 ms, 16 ms, 32 ms, 64 ms, 128 ms, 256 ms
Dimensions	30 (W) x 100 (H) x 71 (D)	Isolation method	Photocoupler isolation
Insulation resistance	20 M $\Omega$ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.
I/O power supply method	Supply from external source	Current capacity of I/O power supply terminal	Without I/O power supply terminals
NX Unit power consumption	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 0.90 W max.</li> <li>Connected to a Communications Coupler Unit 0.60 W max.</li> </ul>	Current consumption from I/O power supply	No consumption
Weight	90 g max.		
Circuit layout			

<b>Installation orientation and restrictions</b>	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: As shown in the following.</p> <ul style="list-style-type: none"> <li>For upright installation</li> </ul> <p>Number of simultaneously ON input points vs. Ambient temperature characteristic</p> <table border="1"> <caption>Data points for Upright Installation</caption> <thead> <tr> <th>Ambient temperature (°C)</th> <th>28.8 V (ON points)</th> <th>24 V (ON points)</th> </tr> </thead> <tbody> <tr><td>40</td><td>32</td><td>32</td></tr> <tr><td>45</td><td>30</td><td>32</td></tr> <tr><td>50</td><td>26</td><td>26</td></tr> <tr><td>55</td><td>10</td><td>13</td></tr> </tbody> </table> <p>I/O power supply voltage</p> <ul style="list-style-type: none"> <li>— 28.8 V</li> <li>- - - 24 V</li> </ul> <ul style="list-style-type: none"> <li>For any installation other than upright</li> </ul> <p>Number of simultaneously ON input points vs. Ambient temperature characteristic</p> <table border="1"> <caption>Data points for Non-upright Installation</caption> <thead> <tr> <th>Ambient temperature (°C)</th> <th>28.8 V (ON points)</th> <th>24 V (ON points)</th> <th>19 V (ON points)</th> </tr> </thead> <tbody> <tr><td>30</td><td>32</td><td>32</td><td>32</td></tr> <tr><td>35</td><td>32</td><td>32</td><td>32</td></tr> <tr><td>40</td><td>32</td><td>32</td><td>32</td></tr> <tr><td>45</td><td>26</td><td>26</td><td>26</td></tr> <tr><td>50</td><td>10</td><td>13</td><td>13</td></tr> <tr><td>55</td><td>5</td><td>8</td><td>8</td></tr> </tbody> </table> <p>I/O power supply voltage</p> <ul style="list-style-type: none"> <li>— 28.8 V</li> <li>- - - 24 V</li> <li>- · - 19 V</li> </ul>	Ambient temperature (°C)	28.8 V (ON points)	24 V (ON points)	40	32	32	45	30	32	50	26	26	55	10	13	Ambient temperature (°C)	28.8 V (ON points)	24 V (ON points)	19 V (ON points)	30	32	32	32	35	32	32	32	40	32	32	32	45	26	26	26	50	10	13	13	55	5	8	8
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## ● DC Input Unit (Fujitsu/OTAX Connector, 30 mm Width)

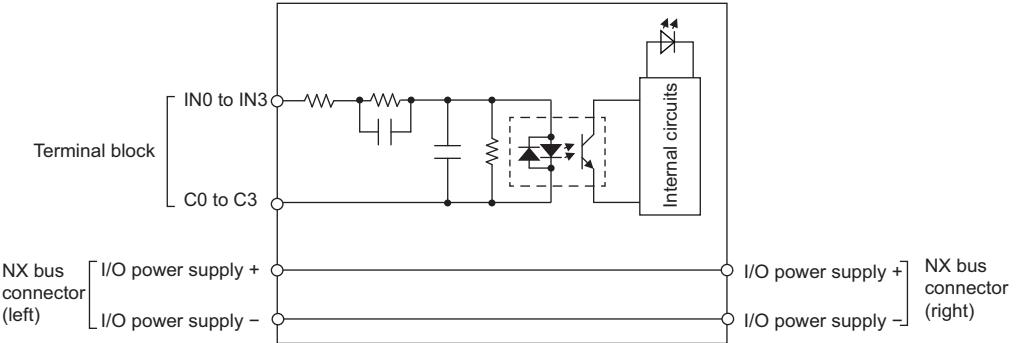
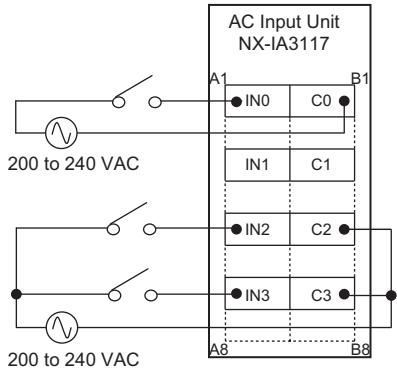
## NX-ID6142-6

Unit name	DC Input Unit	Model	NX-ID6142-6
Number of points	32 points	External connection terminals	Fujitsu/OTAX connector (40 terminals)
I/O refreshing method	Switching Synchronous I/O refreshing and Free-Run refreshing		
Indicators	TS indicator, input indicators 	Internal I/O common	For both NPN/PNP
		Rated input voltage	24 VDC (19 to 28.8 VDC)
		Input current	4.1 mA typical (24 VDC)
		ON voltage/ON current	19 VDC min./3 mA min. (between COM and each signal)
		OFF voltage/OFF current	5 VDC max./1 mA max. (between COM and each signal)
		ON/OFF response time	20 µs max./400 µs max.
		Input filter time	No filter, 0.25 ms, 0.5 ms, 1 ms (default), 2 ms, 4 ms, 8 ms, 16 ms, 32 ms, 64 ms, 128 ms, 256 ms
Dimensions	30 (W) x 100 (H) x 71 (D)	Isolation method	Photocoupler isolation
Insulation resistance	20 MΩ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.
I/O power supply method	Supply from external source	Current capacity of I/O power supply terminal	Without I/O power supply terminals
NX Unit power consumption	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 0.95 W max.</li> <li>Connected to a Communications Coupler Unit 0.55 W max.</li> </ul>	Current consumption from I/O power supply	No consumption
Weight	90 g max.		
Circuit layout			

<b>Installation orientation and restrictions</b>	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: As shown in the following.</p> <ul style="list-style-type: none"> <li>For upright installation</li> </ul> <p>Number of simultaneously ON input points vs. Ambient temperature characteristic</p> <table border="1"> <caption>Data for Upright Installation Graph</caption> <thead> <tr> <th>Ambient temperature (°C)</th> <th>24 V (ON points)</th> <th>28.8 V (ON points)</th> </tr> </thead> <tbody> <tr><td>0</td><td>32</td><td>32</td></tr> <tr><td>10</td><td>32</td><td>32</td></tr> <tr><td>20</td><td>32</td><td>32</td></tr> <tr><td>30</td><td>32</td><td>32</td></tr> <tr><td>40</td><td>32</td><td>32</td></tr> <tr><td>45</td><td>32</td><td>32</td></tr> <tr><td>50</td><td>28</td><td>28</td></tr> <tr><td>55</td><td>13</td><td>10</td></tr> <tr><td>60</td><td>0</td><td>0</td></tr> </tbody> </table> <ul style="list-style-type: none"> <li>For any installation other than upright</li> </ul> <p>Number of simultaneously ON input points vs. Ambient temperature characteristic</p> <table border="1"> <caption>Data for Non-Upright Installation Graph</caption> <thead> <tr> <th>Ambient temperature (°C)</th> <th>19 V (ON points)</th> <th>24 V (ON points)</th> <th>28.8 V (ON points)</th> </tr> </thead> <tbody> <tr><td>0</td><td>32</td><td>32</td><td>32</td></tr> <tr><td>10</td><td>32</td><td>32</td><td>32</td></tr> <tr><td>20</td><td>32</td><td>32</td><td>32</td></tr> <tr><td>30</td><td>32</td><td>32</td><td>32</td></tr> <tr><td>40</td><td>32</td><td>32</td><td>32</td></tr> <tr><td>45</td><td>32</td><td>32</td><td>32</td></tr> <tr><td>50</td><td>32</td><td>32</td><td>32</td></tr> <tr><td>55</td><td>13</td><td>8</td><td>5</td></tr> <tr><td>60</td><td>0</td><td>0</td><td>0</td></tr> </tbody> </table>	Ambient temperature (°C)	24 V (ON points)	28.8 V (ON points)	0	32	32	10	32	32	20	32	32	30	32	32	40	32	32	45	32	32	50	28	28	55	13	10	60	0	0	Ambient temperature (°C)	19 V (ON points)	24 V (ON points)	28.8 V (ON points)	0	32	32	32	10	32	32	32	20	32	32	32	30	32	32	32	40	32	32	32	45	32	32	32	50	32	32	32	55	13	8	5	60	0	0	0
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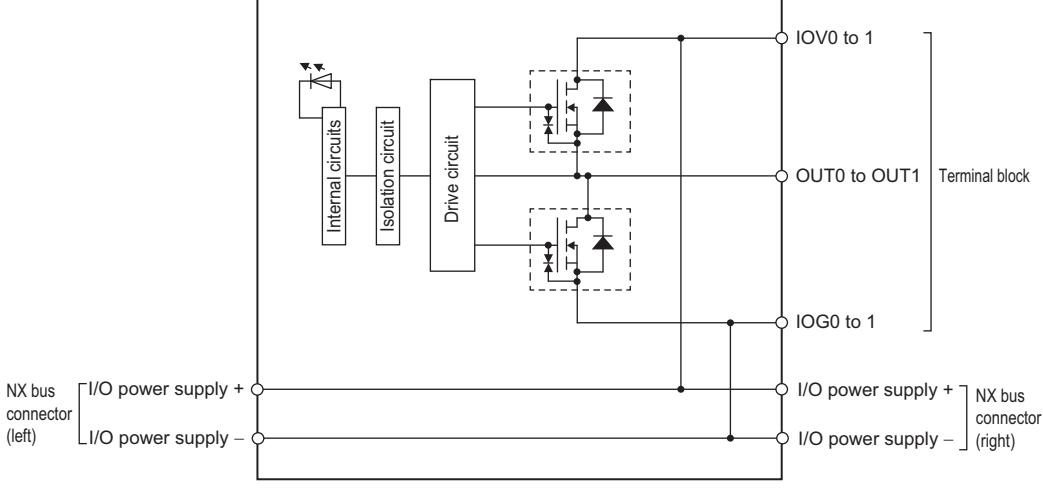
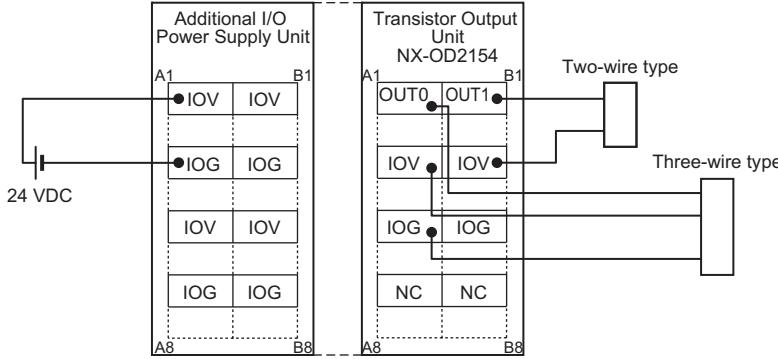
## ● AC Input Unit (Screwless Clamping Terminal Block, 12 mm Width)

## NX-IA3117

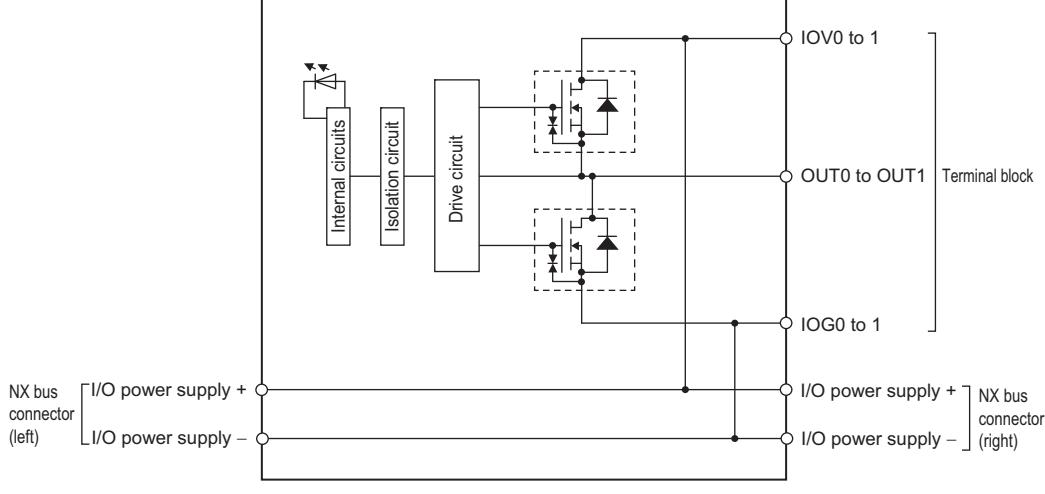
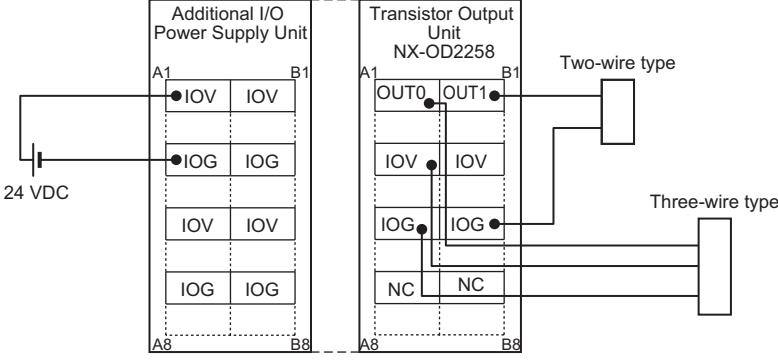
Unit name	AC Input Unit	Model	NX-IA3117
Number of points	4 points, independent contacts	External connection terminals	Screwless clamping terminal block (8 terminals)
Capacity	Free-Run refreshing		
Indicators	TS indicator, input indicator 	Internal I/O common	No polarity
		Rated input voltage	200 to 240 VAC, 50/60 Hz (170 to 264 VAC, ±3 Hz)
		Input current	9 mA typical (at 200 VAC, 50 Hz) 11 mA typical (at 200 VAC, 60 Hz)
		ON voltage/ON current	120 VAC min./4 mA min.
		OFF voltage/OFF current	40 VAC max./2 mA max.
		ON/OFF response time	10 ms max./40 ms max.
		Input filter time	No filter, 0.25 ms, 0.5 ms, 1 ms (default), 2 ms, 4 ms, 8 ms, 16 ms, 32 ms, 64 ms, 128 ms, 256 ms
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Photocoupler isolation
Insulation resistance	Between each AC input circuit: 20 MΩ min. (at 500 VDC) Between the external terminals and the functional ground terminal: 20 MΩ min. (at 500 VDC) Between the external terminals and internal circuits: 20 MΩ min. (at 500 VDC) Between the internal circuit and the functional ground terminal: 20 MΩ min. (at 100 VDC)	Dielectric strength	Between each AC input circuit: AC3700V VAC for 1 min at a leakage current of 5 mA max. Between the external terminals and functional ground terminal: 2300 VAC for 1 min at a leakage current of 5 mA max. Between the external terminals and internal circuits: 2300 VAC for 1 min at a leakage current of 5 mA max. Between the internal circuit and the functional ground terminal: 510 VAC for 1 min at a leakage current of 5 mA max.
I/O power supply method	Supplied from external source.	Current capacity of I/O power supply terminal	Without I/O power supply terminals
NX Unit power consumption	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 0.80 W max.</li> <li>Connected to a Communications Coupler Unit 0.50 W max.</li> </ul>	Current consumption from I/O power supply	No consumption
Weight	60 g max.		
Circuit layout			
Installation orientation and restrictions	Installation orientation: <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> Restrictions: No restrictions		
Terminal connection diagram			
Disconnection/Short-circuit detection	Not supported.	Protective function	Not supported.

## Digital Output Unit Specifications

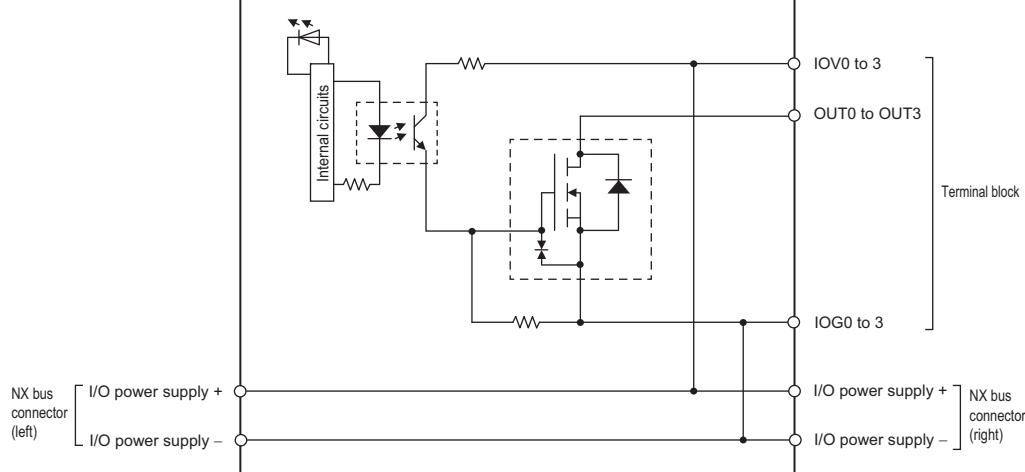
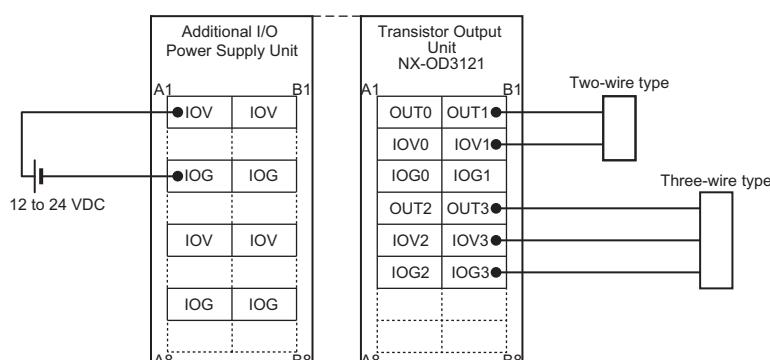
### ● Transistor Output Unit (Screwless Clamping Terminal Block, 12 mm Width) NX-OD2154

Unit name	Transistor Output Unit	Model	NX-OD2154
Number of points	2 points	External connection terminals	Screwless clamping terminal block (8 terminals)
I/O refreshing method	Output refreshing with specified time stamp		
Indicators	 TS indicator, output indicator	Internal I/O common	NPN
		Rated voltage	24 VDC
		Operating load voltage range	15 to 28.8 VDC
		Maximum value of load current	0.5 A/point, 1 A/Unit
		Maximum inrush current	4.0 A/point, 10 ms max.
		Leakage current	0.1 mA max.
		Residual voltage	1.5 V max.
Dimensions	12 (W) x 100 (H) x 71 (D)	ON/OFF response time	300 ns max./300 ns max.
Insulation resistance	20 MΩ min. between isolated circuits (at 100 VDC)	Isolation method	Digital isolator isolation
I/O power supply method	Supply from the NX bus	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.
NX Unit power consumption	<ul style="list-style-type: none"> <li>Connected to a CPU Unit 0.85 W max.</li> <li>Connected to a Communications Coupler Unit 0.45 W max.</li> </ul>	Current capacity of I/O power supply terminal	IOV: 0.5 A/terminal max., IOG: 0.5 A/terminal max.
Weight	70 g max.	I/O current consumption	30 mA max.
Circuit layout	 <p>This unit uses a push-pull output circuit.</p>		
Installation orientation and restrictions	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: No restrictions</p>		
Terminal connection diagram			
Disconnection/Short-circuit detection	Not supported.	Protective function	Not supported.

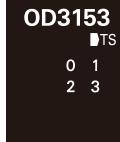
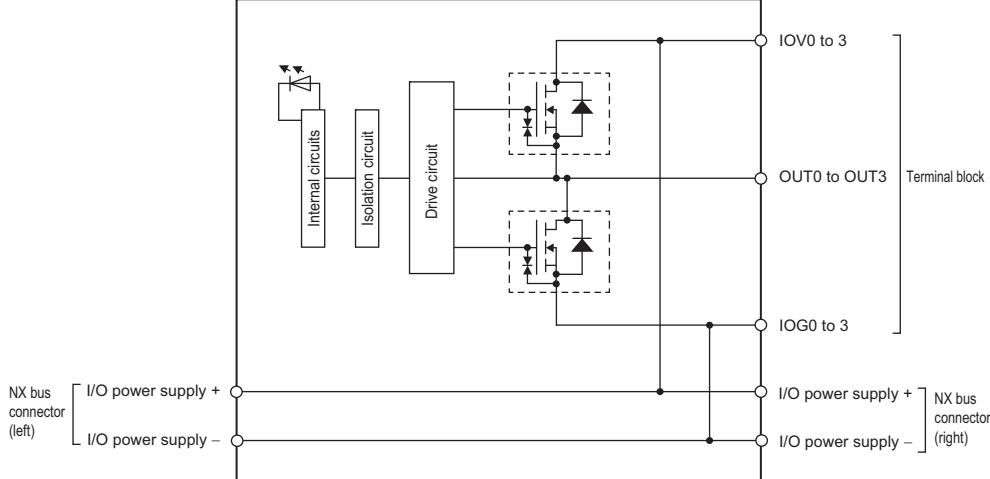
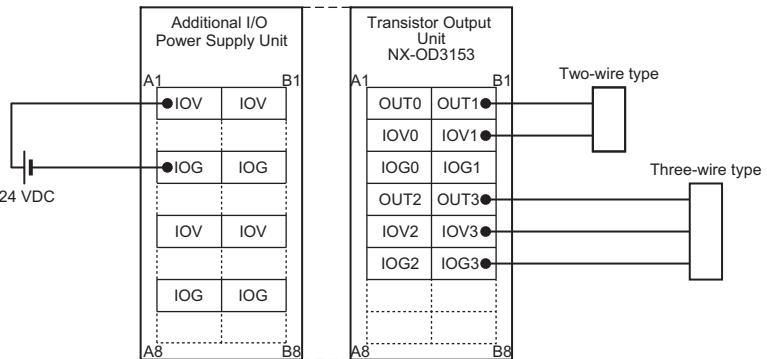
## NX-OD2258

Unit name	Transistor Output Unit	Model	NX-OD2258		
Number of points	2 points	External connection terminals	Screwless clamping terminal block (8 terminals)		
I/O refreshing method	Output refreshing with specified time stamp				
Indicators	TS indicator, output indicator 	Internal I/O common	PNP		
		Rated voltage	24 VDC		
		Operating load voltage range	15 to 28.8 VDC		
		Maximum value of load current	0.5 A/point, 1 A/Unit		
		Maximum inrush current	4.0 A/point, 10 ms max.		
		Leakage current	0.1 mA max.		
		Residual voltage	1.5 V max.		
		ON/OFF response time	300 ns max./300 ns max.		
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Digital isolator isolation		
Insulation resistance	20 MΩ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.		
I/O power supply method	Supply from the NX bus	Current capacity of I/O power supply terminal	IOV: 0.5 A/terminal max., IOG: 0.5 A/terminal max.		
NX Unit power consumption	<ul style="list-style-type: none"> <li>Connected to a CPU Unit 0.85 W max.</li> <li>Connected to a Communications Coupler Unit 0.50 W max.</li> </ul>	I/O current consumption	40 mA max.		
Weight	70 g max.				
Circuit layout	 <p>This unit uses a push-pull output circuit.</p>				
Installation orientation and restrictions	Installation orientation: <ul style="list-style-type: none"> <li>Connected to a CPU Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> Restrictions: No restrictions				
Terminal connection diagram					
Disconnection/Short-circuit detection	Not supported.	Protective function	With load short-circuit protection.		

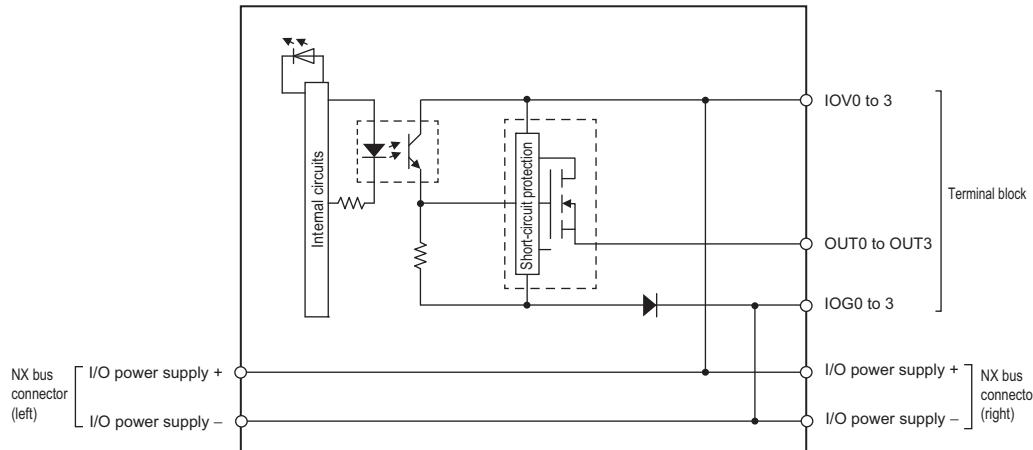
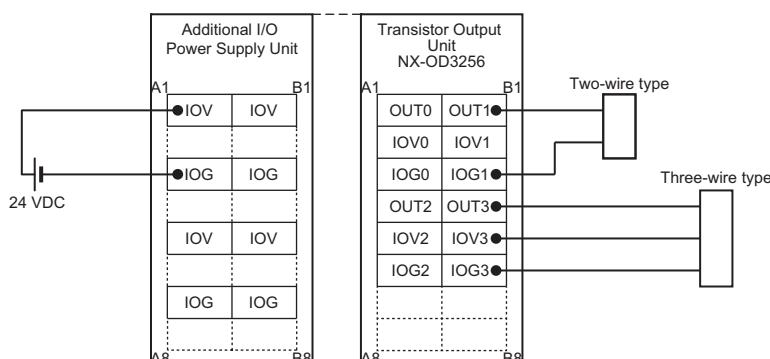
## NX-OD3121

<b>Unit name</b>	Transistor Output Unit	<b>Model</b>	NX-OD3121
<b>Number of points</b>	4 points	<b>External connection terminals</b>	Screwless clamping terminal block (12 terminals)
<b>I/O refreshing method</b>	Selectable Synchronous I/O refreshing or Free-Run refreshing		
<b>Indicators</b>	TS indicator, output indicator 	<b>Internal I/O common</b>	NPN
		<b>Rated voltage</b>	12 to 24 VDC
		<b>Operating load voltage range</b>	10.2 to 28.8 VDC
		<b>Maximum value of load current</b>	0.5 A/point, 2 A/Unit
		<b>Maximum inrush current</b>	4.0 A/point, 10 ms max.
		<b>Leakage current</b>	0.1 mA max.
		<b>Residual voltage</b>	1.5 V max.
		<b>ON/OFF response time</b>	0.1 ms max./0.8 ms max.
<b>Dimensions</b>	12 (W) x 100 (H) x 71 (D)	<b>Isolation method</b>	Photocoupler isolation
<b>Insulation resistance</b>	20 MΩ min. between isolated circuits (at 100 VDC)	<b>Dielectric strength</b>	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.
<b>I/O power supply method</b>	Supply from the NX bus	<b>Current capacity of I/O power supply terminal</b>	IOV: 0.5 A/terminal max., IOG: 0.5 A/terminal max.
<b>NX Unit power consumption</b>	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 0.90 W max.</li> <li>Connected to a Communications Coupler Unit 0.55 W max.</li> </ul>	<b>I/O current consumption</b>	10 mA max.
<b>Weight</b>	70 g max.		
<b>Circuit layout</b>			
<b>Installation orientation and restrictions</b>	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: No restrictions</p>		
<b>Terminal connection diagram</b>			
<b>Disconnection/Short-circuit detection</b>	Not supported.	<b>Protective function</b>	Not supported.

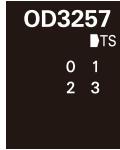
## NX-OD3153

<b>Unit name</b>	Transistor Output Unit	<b>Model</b>	NX-OD3153		
<b>Number of points</b>	4 points	<b>External connection terminals</b>	Screwless clamping terminal block (12 terminals)		
<b>I/O refreshing method</b>	Selectable Synchronous I/O refreshing or Free-Run refreshing				
<b>Indicators</b>	TS indicator, output indicator 	<b>Internal I/O common</b>	NPN		
		<b>Rated voltage</b>	24 VDC		
		<b>Operating load voltage range</b>	15 to 28.8 VDC		
		<b>Maximum value of load current</b>	0.5 A/point, 2 A/Unit		
		<b>Maximum inrush current</b>	4.0 A/point, 10 ms max.		
		<b>Leakage current</b>	0.1 mA max.		
		<b>Residual voltage</b>	1.5 V max.		
		<b>ON/OFF response time</b>	300 ns max./300 ns max.		
<b>Dimensions</b>	12 (W) x 100 (H) x 71 (D)	<b>Isolation method</b>	Digital isolator isolation		
<b>Insulation resistance</b>	20 MΩ min. between isolated circuits (at 100 VDC)	<b>Dielectric strength</b>	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.		
<b>I/O power supply method</b>	Supply from the NX bus	<b>Current capacity of I/O power supply terminal</b>	IOV: 0.5 A/terminal max., IOG: 0.5 A/terminal max.		
<b>NX Unit power consumption</b>	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 0.90 W max.</li> <li>Connected to a Communications Coupler Unit 0.50 W max.</li> </ul>	<b>I/O current consumption</b>	30 mA max.		
<b>Weight</b>	70 g max.				
<b>Circuit layout</b>	 <p>This unit uses a push-pull output circuit.</p>				
<b>Installation orientation and restrictions</b>	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: No restrictions</p>				
<b>Terminal connection diagram</b>					
<b>Disconnection/Short-circuit detection</b>	Not supported.	<b>Protective function</b>	Not supported.		

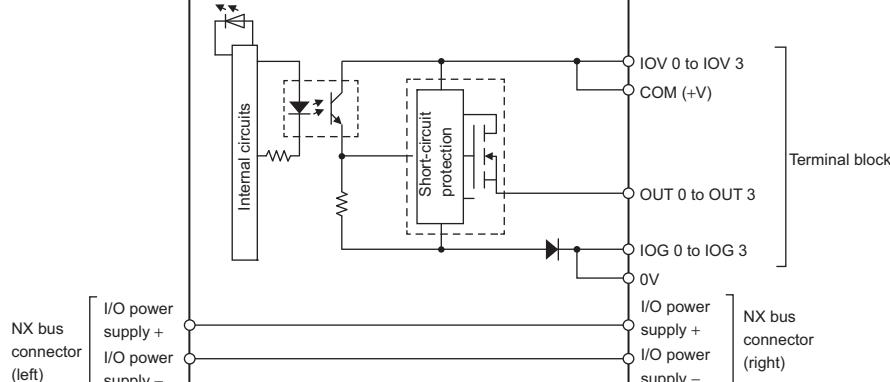
## NX-OD3256

<b>Unit name</b>	Transistor Output Unit	<b>Model</b>	NX-OD3256		
<b>Number of points</b>	4 points	<b>External connection terminals</b>	Screwless clamping terminal block (12 terminals)		
<b>I/O refreshing method</b>	Selectable Synchronous I/O refreshing or Free-Run refreshing				
<b>Indicators</b>	TS indicator, output indicator 	<b>Internal I/O common</b>	PNP		
		<b>Rated voltage</b>	24 VDC		
		<b>Operating load voltage range</b>	15 to 28.8 VDC		
		<b>Maximum value of load current</b>	0.5 A/point, 2 A/Unit		
		<b>Maximum inrush current</b>	4.0 A/point, 10 ms max.		
		<b>Leakage current</b>	0.1 mA max.		
		<b>Residual voltage</b>	1.5 V max.		
		<b>ON/OFF response time</b>	0.5 ms max./1.0 ms max.		
<b>Dimensions</b>	12 (W) x 100 (H) x 71 (D)	<b>Isolation method</b>	Photocoupler isolation		
<b>Insulation resistance</b>	20 MΩ min. between isolated circuits (at 100 VDC)	<b>Dielectric strength</b>	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.		
<b>I/O power supply method</b>	Supply from the NX bus	<b>Current capacity of I/O power supply terminal</b>	IOV: 0.5 A/terminal max., IOG: 0.5 A/terminal max.		
<b>NX Unit power consumption</b>	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 0.90 W max.</li> <li>Connected to a Communications Coupler Unit 0.55 W max.</li> </ul>	<b>I/O current consumption</b>	20 mA max.		
<b>Weight</b>	70 g max.				
<b>Circuit layout</b>					
<b>Installation orientation and restrictions</b>	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: No restrictions</p>				
<b>Terminal connection diagram</b>					
<b>Disconnection/Short-circuit detection</b>	Not supported.	<b>Protective function</b>	With load short-circuit protection.		

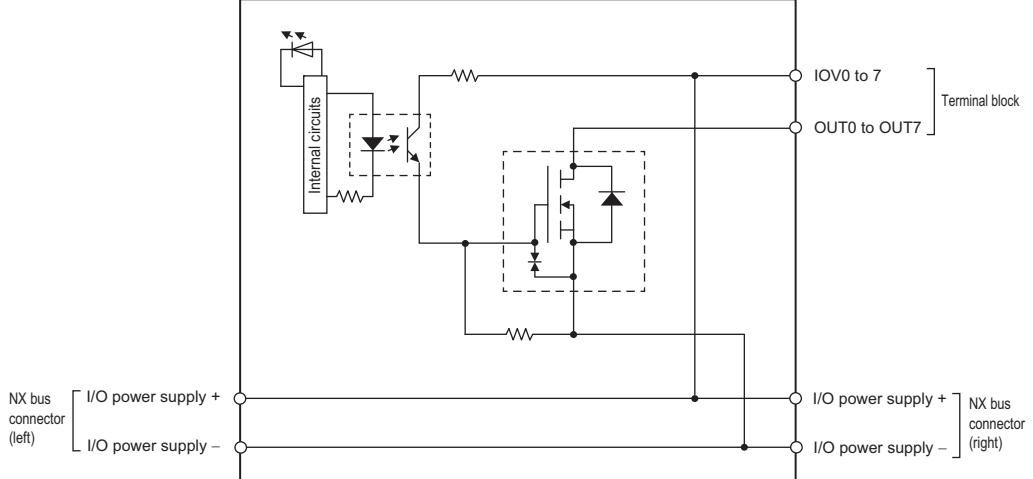
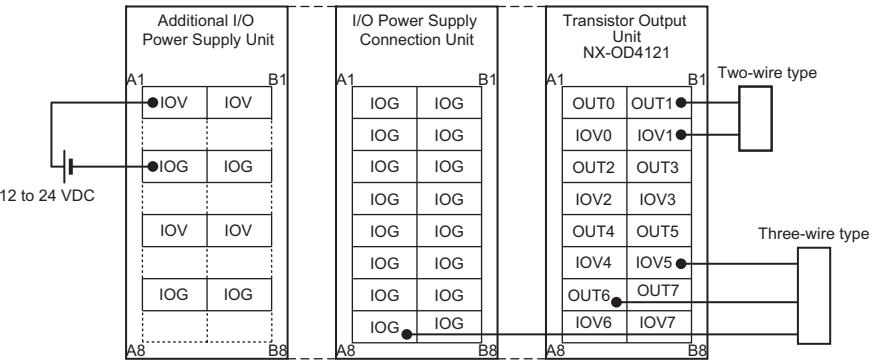
## NX-OD3257

Unit name	Transistor Output Unit	Model	NX-OD3257		
Number of points	4 points	External connection terminals	Screwless clamping terminal block (12 terminals)		
I/O refreshing method	Selectable Synchronous I/O refreshing or Free-Run refreshing				
Indicators	TS indicator, output indicator 	Internal I/O common	PNP		
		Rated voltage	24 VDC		
		Operating load voltage range	15 to 28.8 VDC		
		Maximum value of load current	0.5 A/point, 2 A/Unit		
		Maximum inrush current	4.0 A/point, 10 ms max.		
		Leakage current	0.1 mA max.		
		Residual voltage	1.5 V max.		
		ON/OFF response time	300 ns max./300 ns max.		
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Digital isolator isolation		
Insulation resistance	20 MΩ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.		
I/O power supply method	Supply from the NX bus	Current capacity of I/O power supply terminal	IOV: 0.5 A/terminal max., IOG: 0.5 A/terminal max.		
NX Unit power consumption	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 0.85 W max.</li> <li>Connected to a Communications Coupler Unit 0.50 W max.</li> </ul>	I/O current consumption	40 mA max.		
Weight	70 g max.				
Circuit layout					
Installation orientation and restrictions	Installation orientation: <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> Restrictions: No restrictions				
Terminal connection diagram					
Disconnection/Short-circuit detection	Not supported.	Protective function	With load short-circuit protection.		

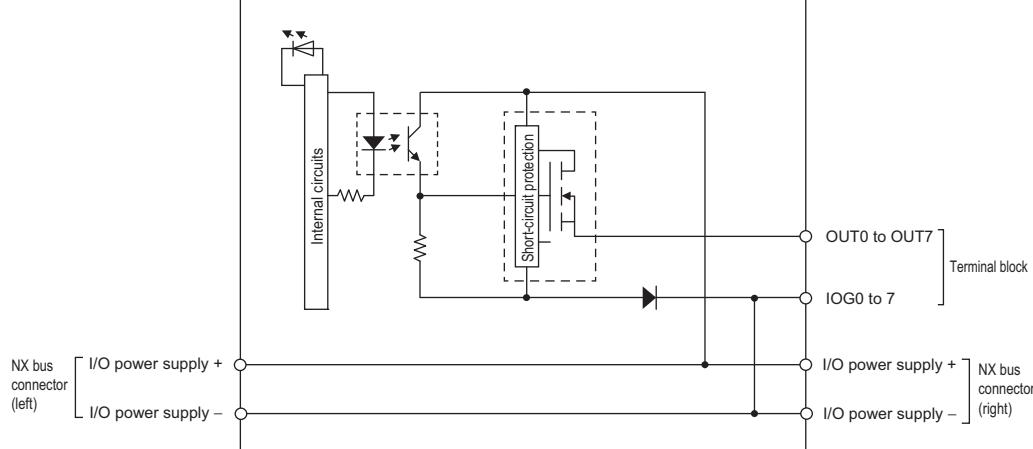
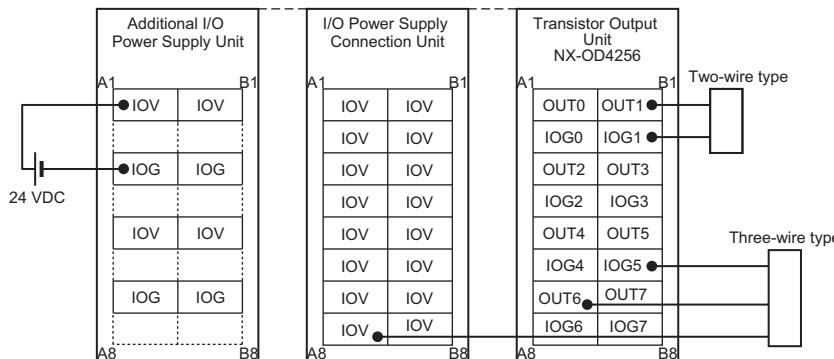
## NX-OD3268

Unit name	Transistor Output Unit	Model	NX-OD3268
Number of points	4 points	External connection terminals	Screwless clamping terminal block (16 terminals)
I/O refreshing method	Switching Synchronous I/O refreshing and Free-Run refreshing		
Indicators	<p>TS indicator, output indicator</p> 	Internal I/O common	PNP
		Rated voltage	24 VDC
		Operating load voltage range	15 to 28.8 VDC
		Maximum value of load current	2 A/point, 8 A/Unit
		Maximum inrush current	4.0 A/point, 10 ms max.
		Leakage current	0.1 mA max.
		Residual voltage	1.5 V max.
		ON/OFF response time	0.5 ms max./1.0 ms max.
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Photocoupler isolation
Insulation resistance	20 MΩ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.
I/O power supply method	Supply from external source	Current capacity of I/O power supply terminal	IOV: 2 A/terminal max., IOG: 2 A/terminal max., COM (+V): 4 A/terminal max., 0V: 4 A/terminal max.
NX Unit power consumption	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 0.85 W max.</li> <li>Connected to a Communications Coupler Unit 0.50 W max.</li> </ul>	Current consumption from I/O power supply	20 mA max.
Weight	70 g max.		
Circuit layout			
Installation orientation and restrictions	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: No restrictions</p>		
Terminal connection diagram			
Disconnection/Short-circuit detection	Not supported.	Protective function	With load short-circuit protection.

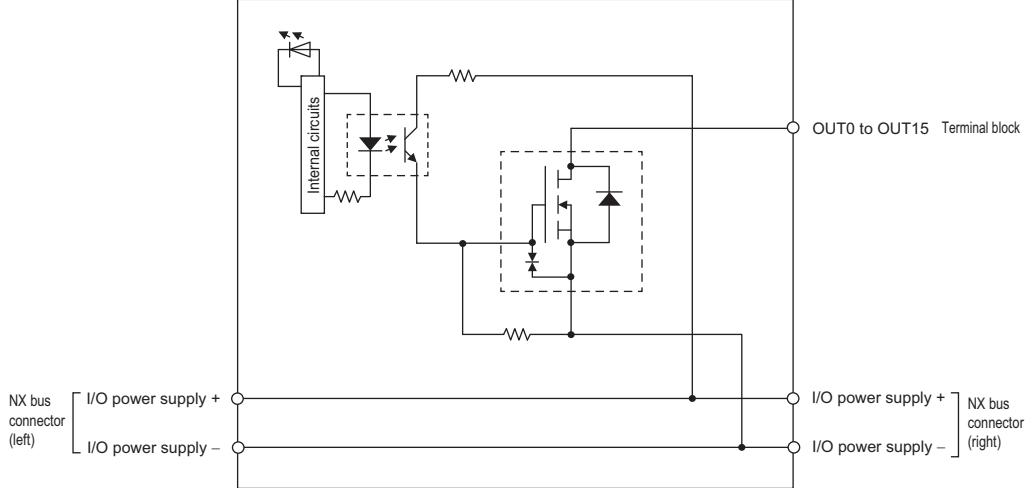
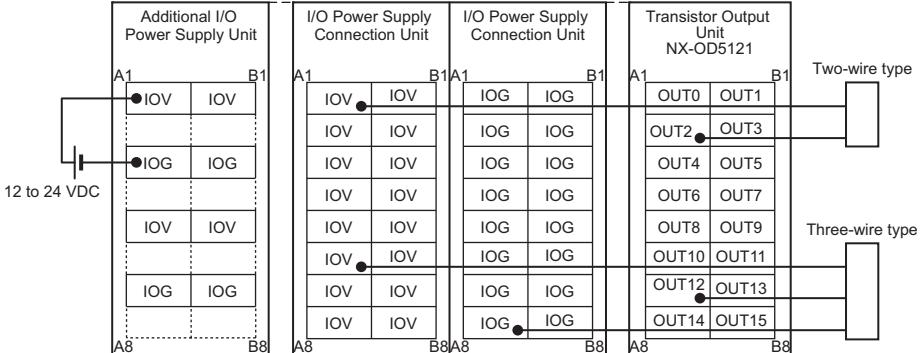
## NX-OD4121

Unit name	Transistor Output Unit	Model	NX-OD4121		
Number of points	8 points	External connection terminals	Screwless clamping terminal block (16 terminals)		
I/O refreshing method	Selectable Synchronous I/O refreshing or Free-Run refreshing				
Indicators	TS indicator, output indicator 	Internal I/O common	NPN		
		Rated voltage	12 to 24 VDC		
		Operating load voltage range	10.2 to 28.8 VDC		
		Maximum value of load current	0.5 A/point, 4 A/Unit		
		Maximum inrush current	4.0 A/point, 10 ms max.		
		Leakage current	0.1 mA		
		Residual voltage	1.5 V max.		
		ON/OFF response time	0.1 ms max./0.8 ms max.		
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Photocoupler isolation		
Insulation resistance	20 MΩ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.		
I/O power supply method	Supply from the NX bus	Current capacity of I/O power supply terminal	IOV: 0.5 A/terminal max.		
NX Unit power consumption	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 0.90 W max.</li> <li>Connected to a Communications Coupler Unit 0.55 W max.</li> </ul>	I/O current consumption	10 mA max.		
Weight	70 g max.				
Circuit layout					
Installation orientation and restrictions	Installation orientation: <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> Restrictions: No restrictions				
Terminal connection diagram					
Disconnection/Short-circuit detection	Not supported.	Protective function	Not supported.		

## NX-OD4256

Unit name	Transistor Output Unit	Model	NX-OD4256
Number of points	8 points	External connection terminals	Screwless clamping terminal block (16 terminals)
I/O refreshing method	Selectable Synchronous I/O refreshing or Free-Run refreshing		
Indicators	TS indicator, output indicator 	Internal I/O common	PNP
		Rated voltage	24 VDC
		Operating load voltage range	15 to 28.8 VDC
		Maximum value of load current	0.5 A/point, 4 A/Unit
		Maximum inrush current	4.0 A/point, 10 ms max.
		Leakage current	0.1 mA
		Residual voltage	1.5 V max.
		ON/OFF response time	0.5 ms max./1.0 ms max.
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Photocoupler isolation
Insulation resistance	20 MΩ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.
I/O power supply method	Supply from the NX bus	Current capacity of I/O power supply terminal	IOG: 0.5 A/terminal max.
NX Unit power consumption	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 1.00 W max.</li> <li>Connected to a Communications Coupler Unit 0.65 W max.</li> </ul>	I/O current consumption	30 mA max.
Weight	70 g max.		
Circuit layout			
Installation orientation and restrictions	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: No restrictions</p>		
Terminal connection diagram			
Disconnection/Short-circuit detection	Not supported.	Protective function	With load short-circuit protection.

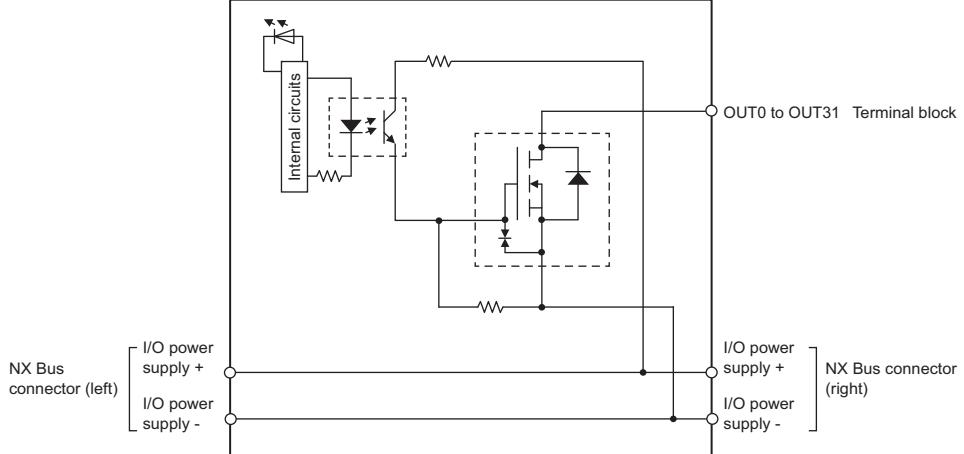
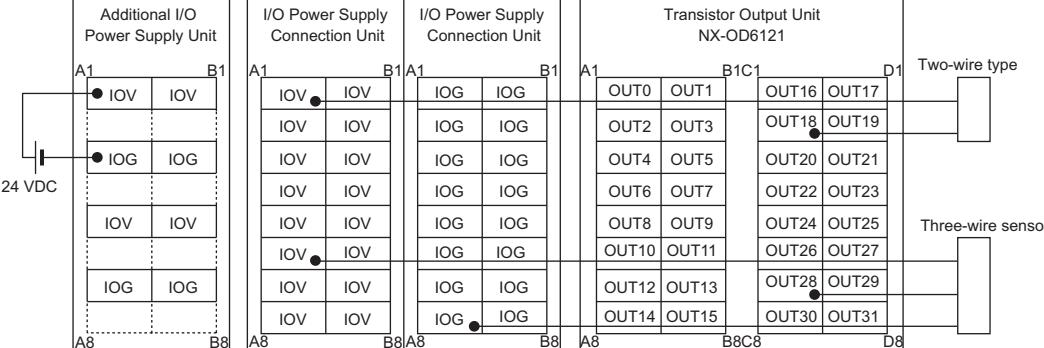
## NX-OD5121

Unit name	Transistor Output Unit	Model	NX-OD5121		
Number of points	16 points	External connection terminals	Screwless clamping terminal block (16 terminals)		
I/O refreshing method	Selectable Synchronous I/O refreshing or Free-Run refreshing				
Indicators	TS indicator, output indicator 	Internal I/O common	NPN		
		Rated voltage	12 to 24 VDC		
		Operating load voltage range	10.2 to 28.8 VDC		
		Maximum value of load current	0.5 A/point, 4 A/Unit		
		Maximum inrush current	4.0 A/point, 10 ms max.		
		Leakage current	0.1 mA max.		
		Residual voltage	1.5 V max.		
		ON/OFF response time	0.1 ms max./0.8 ms max.		
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Photocoupler isolation		
Insulation resistance	20 MΩ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.		
I/O power supply method	Supply from the NX bus	Current capacity of I/O power supply terminal	Without I/O power supply terminals		
NX Unit power consumption	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 1.00 W max.</li> <li>Connected to a Communications Coupler Unit 0.65 W max.</li> </ul>	I/O current consumption	20 mA max.		
Weight	70 g max.				
Circuit layout					
Installation orientation and restrictions	Installation orientation: <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> Restrictions: No restrictions				
Terminal connection diagram					
Disconnection/Short-circuit detection	Not supported.	Protective function	Not supported.		

## NX-OD5256

Unit name	Transistor Output Unit	Model	NX-OD5256
Number of points	16 points	External connection terminals	Screwless clamping terminal block (16 terminals)
I/O refreshing method	Selectable Synchronous I/O refreshing or Free-Run refreshing		
Indicators	<p>TS indicator, output indicator</p> <p><b>OD5256</b> TS</p> <p>0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15</p>	Internal I/O common	PNP
		Rated voltage	24 VDC
		Operating load voltage range	15 to 28.8 VDC
		Maximum value of load current	0.5 A/point, 4 A/Unit
		Maximum inrush current	4.0 A/point, 10 ms max.
		Leakage current	0.1 mA max.
		Residual voltage	1.5 V max.
		ON/OFF response time	0.5 ms max./1.0 ms max.
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Photocoupler isolation
Insulation resistance	20 MΩ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.
I/O power supply method	Supply from the NX bus	Current capacity of I/O power supply terminal	Without I/O power supply terminals
NX Unit power consumption	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 1.10 W max.</li> <li>Connected to a Communications Coupler Unit 0.70 W max.</li> </ul>	I/O current consumption	40 mA max.
Weight	70 g max.		
Circuit layout			
Installation orientation and restrictions	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: No restrictions</p>		
Terminal connection diagram			
Disconnection/Short-circuit detection	Not supported.	Protective function	With load short-circuit protection.

## NX-OD6121

Unit name	Transistor Output Unit	Model	NX-OD6121		
Number of points	32 points	External connection terminals	Screwless clamping terminal block (16 terminals x 2)		
I/O refreshing method	Selectable Synchronous I/O refreshing or Free-Run refreshing				
Indicators	<b>OD6121</b>  0 1 2 3 16 17 18 19 4 5 6 7 20 21 22 23 8 9 10 11 24 25 26 27 12 13 14 15 28 29 30 31	Internal I/O common	NPN		
		Rated voltage	12 to 24 VDC		
		Operating load voltage range	10.2 to 28.8 VDC		
		Maximum value of load current	0.5 A/point, 4 A/terminal block *1, 8 A/Unit		
		Maximum inrush current	4.0 A/point, 10 ms max.		
		Leakage current	0.1 mA max.		
		Residual voltage	1.5 V max.		
		ON/OFF response time	0.1 ms max./0.8 ms max.		
Dimensions	24 (W) x 100 (H) x 71 (D)	Isolation method	Photocoupler isolation		
Insulation resistance	20 MΩ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.		
I/O power supply method	Supply from the NX bus	Current capacity of I/O power supply terminal	Without I/O power supply terminals		
NX Unit power consumption	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 1.45 W max.</li> <li>Connected to a Communications Coupler Unit 0.95 W max.</li> </ul>	I/O current consumption	40 mA max.		
Weight	130 g max.				
Circuit layout					
Installation orientation and restrictions	Installation orientation: <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> Restrictions: No restrictions				
Terminal connection diagram					
Disconnection/Short-circuit detection	Not supported.	Protective function	Not supported.		

\*1. The total load currents of OUT 0 to 15 and the total load currents of OUT 16 to 31 must be 4 A or less respectively.

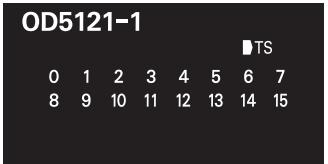
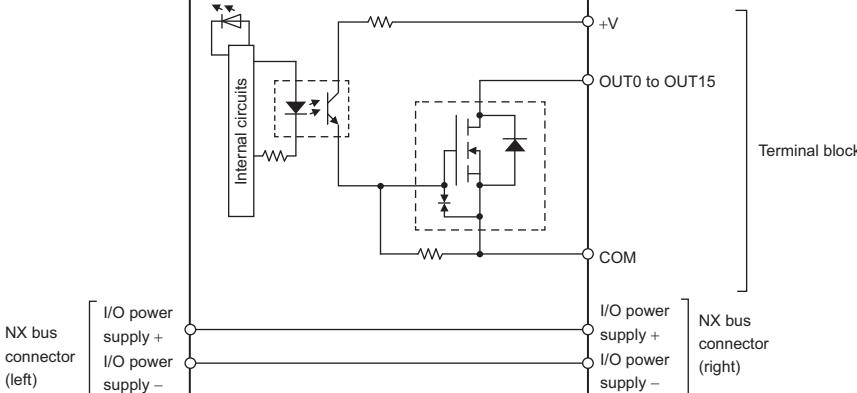
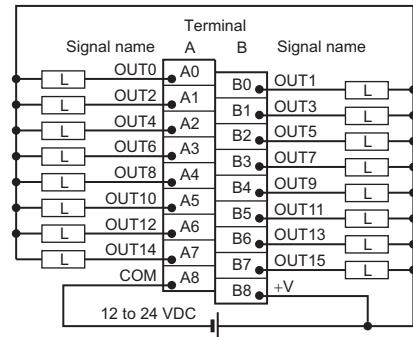
## NX-OD6256

Unit name	Transistor Output Unit	Model	NX-OD6256
Number of points	32 points	External connection terminals	Screwless clamping terminal block (16 terminals x 2)
I/O refreshing method	Selectable Synchronous I/O refreshing or Free-Run refreshing		
Indicators	TS indicator, output indicator <b>OD6256</b> ■ TS 0 1 2 3 16 17 18 19 4 5 6 7 20 21 22 23 8 9 10 11 24 25 26 27 12 13 14 15 28 29 30 31	Internal I/O common	PNP
Dimensions	24 (W) x 100 (H) x 71 (D)	Rated voltage	24 VDC
Insulation resistance	20 MΩ min. between isolated circuits (at 100 VDC)	Operating load voltage range	15 to 28.8 VDC
I/O power supply method	Supply from the NX bus	Maximum value of load current	0.5 A/point, 4 A/terminal block *1, 8 A/Unit
NX Unit power consumption	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 1.45 W max.</li> <li>Connected to a Communications Coupler Unit 1.00 W max.</li> </ul>	Maximum inrush current	4.0 A/point, 10 ms max.
Weight	130 g max.	Leakage current	0.1 mA max.
Circuit layout			
Installation orientation and restrictions	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: No restrictions</p>		
Terminal connection diagram			
Disconnection/Short-circuit detection	Not supported.	Protective function	With load short-circuit protection.

\*1. The total load currents of OUT 0 to 15 and the total load currents of OUT 16 to 31 must be 4 A or less respectively.

## ● Transistor Output Unit (M3 Screw Terminal Block, 30 mm Width)

## NX-OD5121-1

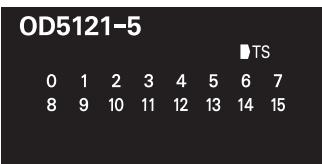
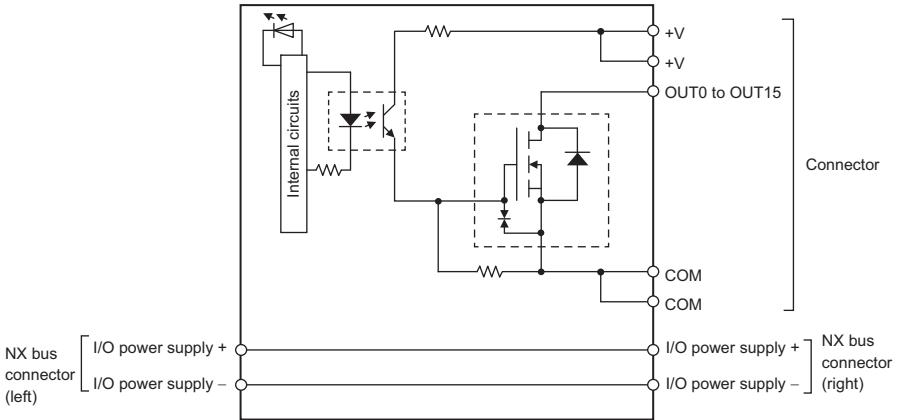
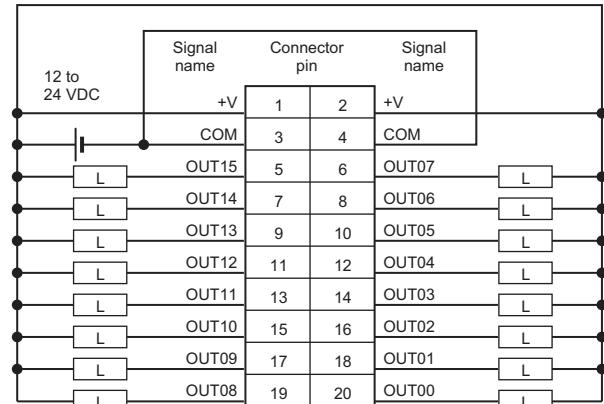
Unit name	Transistor Output Unit	Model	NX-OD5121-1		
Number of points	16 points	External connection terminals	M3 screw terminal block (18 terminals)		
I/O refreshing method	Switching Synchronous I/O refreshing and Free-Run refreshing				
Indicators	<p>TS indicator, output indicator</p> <p><b>OD5121-1</b></p> 	Internal I/O common	NPN		
		Rated voltage	12 to 24 VDC		
		Operating load voltage range	10.2 to 28.8 VDC		
		Maximum value of load current	0.5 A/point, 5 A/Unit		
		Maximum inrush current	4.0 A/point, 10 ms max.		
		Leakage current	0.1 mA max.		
		Residual voltage	1.5 V max.		
		ON/OFF response time	0.1 ms max./0.8 ms max.		
Dimensions	30 (W) x 100 (H) x 71 (D)	Isolation method	Photocoupler isolation		
Insulation resistance	20 MΩ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.		
I/O power supply method	Supply from the external source	Current capacity of I/O power supply terminal	Without I/O power supply terminals		
NX Unit power consumption	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 0.90 W max.</li> <li>Connected to a Communications Coupler Unit 0.60 W max.</li> </ul>	Current consumption from I/O power supply	30 mA max.		
Weight	125 g max.				
Circuit layout					
Installation orientation and restrictions	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: No restrictions</p>				
Terminal connection diagram					
Disconnection/Short-circuit detection	Not supported.	Protective function	Not supported.		

## NX-OD5256-1

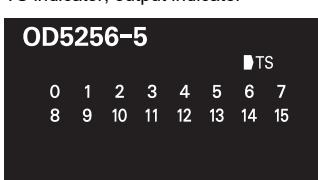
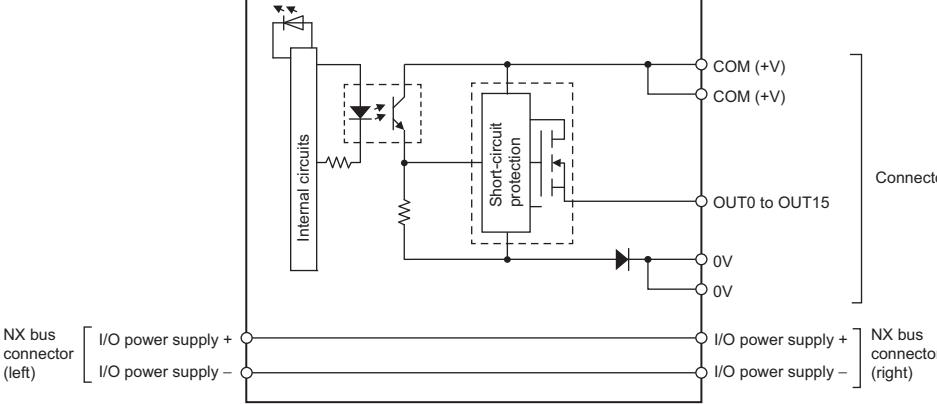
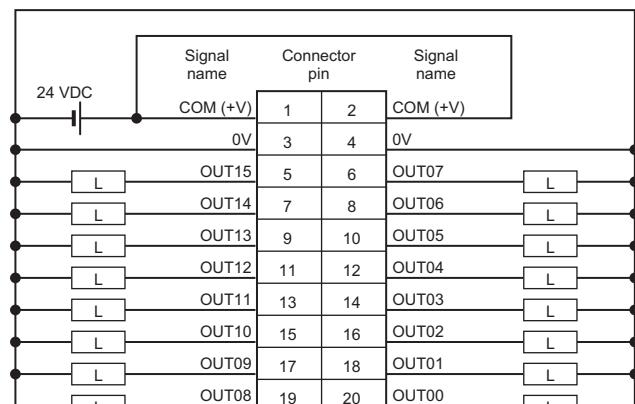
<b>Unit name</b>	Transistor Output Unit	<b>Model</b>	NX-OD5256-1
<b>Number of points</b>	16 points	<b>External connection terminals</b>	M3 screw terminal block (18 terminals)
<b>I/O refreshing method</b>	Switching Synchronous I/O refreshing and Free-Run refreshing		
<b>Indicators</b>	TS indicator, output indicator  <b>OD5256-1</b> 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	<b>Internal I/O common</b>	PNP
		<b>Rated voltage</b>	24 VDC
		<b>Operating load voltage range</b>	20.4 to 28.8 VDC
		<b>Maximum value of load current</b>	0.5 A/point, 5 A/Unit
		<b>Maximum inrush current</b>	4.0 A/point, 10 ms max.
		<b>Leakage current</b>	0.1 mA max.
		<b>Residual voltage</b>	1.5 V max.
		<b>ON/OFF response time</b>	0.5 ms max./1.0 ms max.
<b>Dimensions</b>	30 (W) x 100 (H) x 71 (D)	<b>Isolation method</b>	Photocoupler isolation
<b>Insulation resistance</b>	20 MΩ min. between isolated circuits (at 100 VDC)	<b>Dielectric strength</b>	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.
<b>I/O power supply method</b>	Supply from external source	<b>Current capacity of I/O power supply terminal</b>	Without I/O power supply terminals
<b>NX Unit power consumption</b>	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 0.95 W max.</li> <li>Connected to a Communications Coupler Unit 0.65 W max.</li> </ul>	<b>Current consumption from I/O power supply</b>	30 mA max.
<b>Weight</b>	125 g max.		
<b>Circuit layout</b>			
<b>Installation orientation and restrictions</b>	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: No restrictions</p>		
<b>Terminal connection diagram</b>			
<b>Disconnection/Short-circuit detection</b>	Not supported.	<b>Protective function</b>	With load short-circuit protection.

## ● Transistor Output Unit (MIL Connector, 30 mm Width)

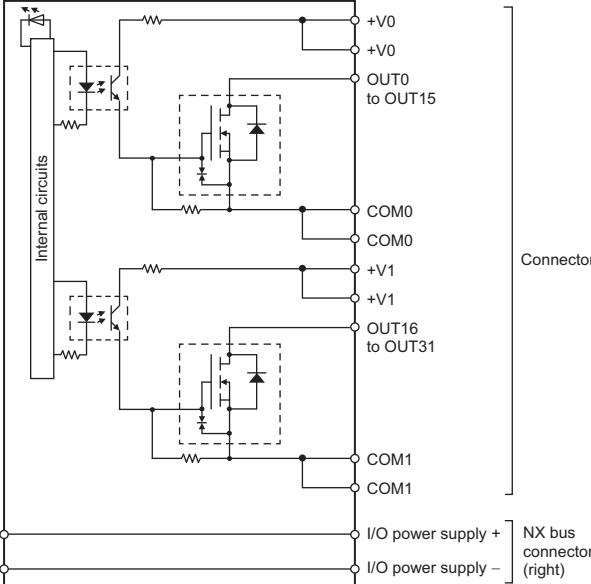
## NX-OD5121-5

Unit name	Transistor Output Unit	Model	NX-OD5121-5
Number of points	16 points	External connection terminals	MIL connector (20 terminals)
I/O refreshing method	Switching Synchronous I/O refreshing and Free-Run refreshing		
Indicators	TS indicator, output indicator 	Internal I/O common	NPN
		Rated voltage	12 to 24 VDC
		Operating load voltage range	10.2 to 28.8 VDC
		Maximum value of load current	0.5 A/point, 2 A/Unit
		Maximum inrush current	4.0 A/point, 10 ms max.
		Leakage current	0.1 mA max.
		Residual voltage	1.5 V max.
		ON/OFF response time	0.1 ms max./0.8 ms max.
Dimensions	30 (W) x 100 (H) x 71 (D)	Isolation method	Photocoupler isolation
Insulation resistance	20 MΩ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.
I/O power supply method	Supply from external source	Current capacity of I/O power supply terminal	Without I/O power supply terminals
NX Unit power consumption	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: 0.95 W max.</li> <li>Connected to a Communications Coupler Unit: 0.60 W max.</li> </ul>	Current consumption from I/O power supply	30 mA max.
Weight	80 g max.		
Circuit layout			
Installation orientation and restrictions	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: No restrictions</p>		
Terminal connection diagram	 <ul style="list-style-type: none"> <li>Be sure to wire both pins 3 and 4 (COM).</li> <li>Be sure to wire both pins 1 and 2 (+V).</li> </ul>		
Disconnection/Short-circuit detection	Not supported.	Protective function	Not supported.

## NX-OD5256-5

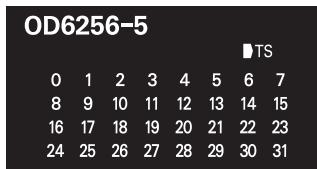
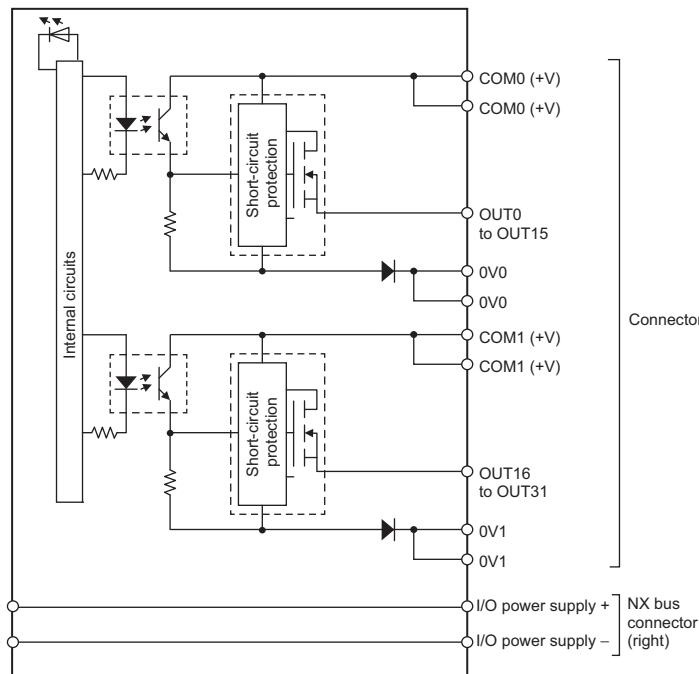
Unit name	Transistor Output Unit	Model	NX-OD5256-5
Number of points	16 points	External connection terminals	MIL connector (20 terminals)
I/O refreshing method	Switching Synchronous I/O refreshing and Free-Run refreshing		
Indicators	TS indicator, output indicator 	Internal I/O common	PNP
		Rated voltage	24 VDC
		Operating load voltage range	20.4 to 28.8 VDC
		Maximum value of load current	0.5 A/point, 2 A/Unit
		Maximum inrush current	4.0 A/point, 10 ms max.
		Leakage current	0.1 mA max.
		Residual voltage	1.5 V max.
		ON/OFF response time	0.5 ms max./1.0 ms max.
Dimensions	30 (W) x 100 (H) x 71 (D)	Isolation method	Photocoupler isolation
Insulation resistance	20 MΩ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.
I/O power supply method	Supplied from external source.	Current capacity of I/O power supply terminal	Without I/O power supply terminals
NX Unit power consumption	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 1.00 W max.</li> <li>Connected to a Communications Coupler Unit 0.70 W max.</li> </ul>	Current consumption from I/O power supply	40 mA max.
Weight	85 g max.		
Circuit layout			
Installation orientation and restrictions	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: No restrictions</p>		
Terminal connection diagram	 <ul style="list-style-type: none"> <li>Be sure to wire both pins 1 and 2 (COM (+V)).</li> <li>Be sure to wire both pins 3 and 4 (0V).</li> </ul>		
Disconnection/Short-circuit detection	Not supported.	Protective function	With load short-circuit protection.

## NX-OD6121-5

Unit name	Transistor Output Unit	Model	NX-OD6121-5
Number of points	32 points	External connection terminals	MIL connector (40 terminals)
I/O refreshing method	Switching Synchronous I/O refreshing and Free-Run refreshing		
Indicators	TS indicator, output indicator  <b>OD6121-5</b> 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	Internal I/O common	NPN
Dimensions	30 (W) x 100 (H) x 71 (D)	Rated voltage	12 to 24 VDC
Insulation resistance	20 MΩ min. between isolated circuits (at 100 VDC)	Operating load voltage range	10.2 to 28.8 VDC
I/O power supply method	Supply from external source	Maximum value of load current	0.5 A/point, 2 A/common, 4 A/Unit
NX Unit power consumption	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: 1.00 W max.</li> <li>Connected to a Communications Coupler Unit: 0.80 W max.</li> </ul>	Maximum inrush current	4.0 A/point, 10 ms max.
Weight	90 g max.	Leakage current	0.1 mA max.
Circuit layout	 <p>Internal circuits</p> <p>Connector</p> <p>NX bus connector (left) I/O power supply + I/O power supply - NX bus connector (right) I/O power supply + I/O power supply -</p>		
Installation orientation and restrictions	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: No restrictions</p>		

<b>Terminal connection diagram</b>			
<b>Disconnection/Short-circuit detection</b>	Not supported.	<b>Protective function</b>	Not supported.

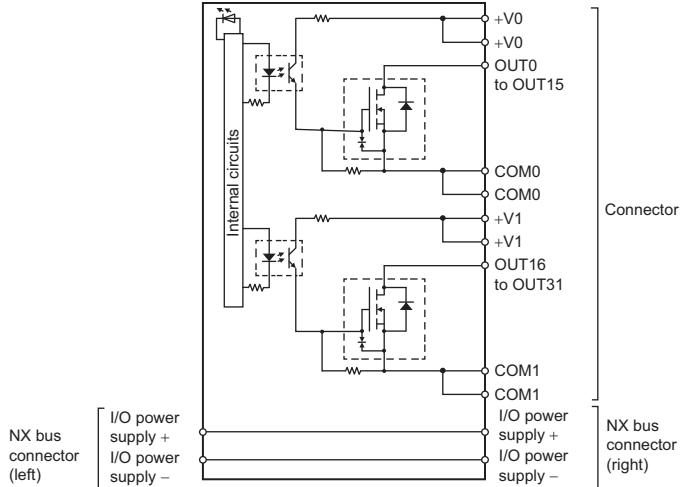
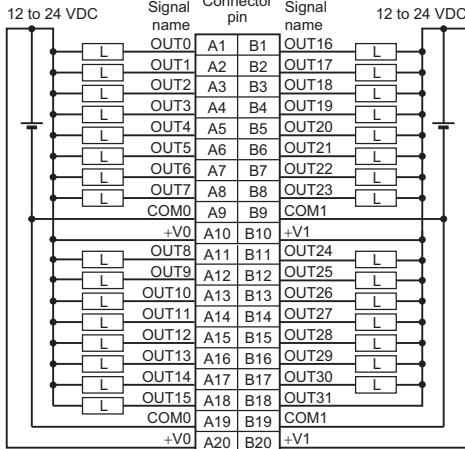
## NX-OD6256-5

Unit name	Transistor Output Unit	Model	NX-OD6256-5		
Number of points	32 points	External connection terminals	MIL connector (40 terminals)		
I/O refreshing method	Switching Synchronous I/O refreshing and Free-Run refreshing				
Indicators	TS indicator, output indicator 	Internal I/O common	PNP		
		Rated voltage	24 VDC		
		Operating load voltage range	20.4 to 28.8 VDC		
		Maximum value of load current	0.5 A/point, 2 A/common, 4 A/Unit		
		Maximum inrush current	4.0 A/point, 10 ms max.		
		Leakage current	0.1 mA max.		
		Residual voltage	1.5 V max.		
		ON/OFF response time	0.5 ms max./1.0 ms max.		
Dimensions	30 (W) x 100 (H) x 71 (D)	Isolation method	Photocoupler isolation		
Insulation resistance	20 MΩ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.		
I/O power supply method	Supply from external source	Current capacity of I/O power supply terminal	Without I/O power supply terminals		
NX Unit power consumption	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: 1.30 W max.</li> <li>Connected to a Communications Coupler Unit: 1.00 W max.</li> </ul>	Current consumption from I/O power supply	80 mA max.		
Weight	95 g max.				
Circuit layout					
Installation orientation and restrictions	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: No restrictions</p>				

<b>Terminal connection diagram</b>		<ul style="list-style-type: none"> <li>• Be sure to wire both pins 21 and 22 (COM0 (+V)).</li> <li>• Be sure to wire both pins 1 and 2 (COM1 (+V)).</li> <li>• Be sure to wire both pins 23 and 24 (0V0).</li> <li>• Be sure to wire both pins 3 and 4 (0V1).</li> </ul>
<b>Disconnection/Short-circuit detection</b>	Not supported.	<b>Protective function</b> With load short-circuit protection.

## ● Transistor Output Unit (Fujitsu/OTAX Connector, 30 mm Width)

## NX-OD6121-6

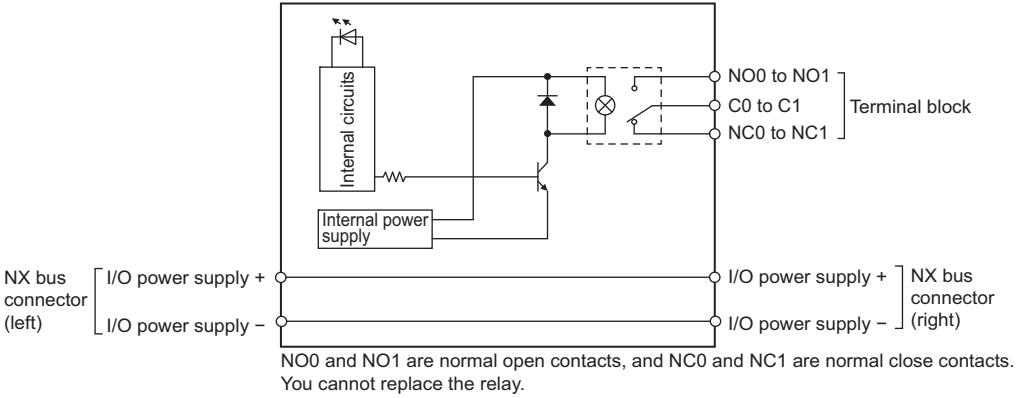
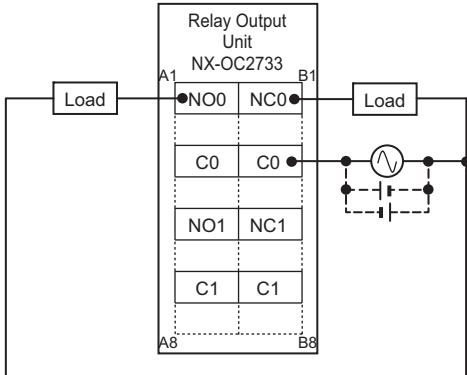
Unit name	Transistor Output Unit	Model	NX-OD6121-6
Number of points	32 points	External connection terminals	Fujitsu/OTAX connector (40 terminals)
I/O refreshing method	Switching Synchronous I/O refreshing and Free-Run refreshing		
Indicators	TS indicator, output indicator  <b>OD6121-6</b> 	Internal I/O common	NPN
		Rated voltage	12 to 24 VDC
		Operating load voltage range	10.2 to 28.8 VDC
		Maximum value of load current	0.5 A/point, 2 A/common, 4 A/Unit
		Maximum inrush current	4.0 A/point, 10 ms max.
		Leakage current	0.1 mA max.
		Residual voltage	1.5 V max.
		ON/OFF response time	0.1 ms max./0.8 ms max.
Dimensions	30 (W) x 100 (H) x 71 (D)	Isolation method	Photocoupler isolation
Insulation resistance	20 MΩ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.
I/O power supply method	Supply from external source	Current capacity of I/O power supply terminal	Without I/O power supply terminals
NX Unit power consumption	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 1.10 W max.</li> <li>Connected to a Communications Coupler Unit 0.80 W max.</li> </ul>	Current consumption from I/O power supply	50 mA max.
Weight	90 g max.		
Circuit layout			
Installation orientation and restrictions	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: No restrictions</p>		
Terminal connection diagram	 <ul style="list-style-type: none"> <li>Be sure to wire both pins A9 and A19 (COM0).</li> <li>Be sure to wire both pins B9 and B19 (COM1).</li> <li>Be sure to wire both pins A10 and A20 (+V0).</li> <li>Be sure to wire both pins B10 and B20 (-V1).</li> </ul>		
Disconnection/Short-circuit detection	Not supported.	Protective function	Not supported.

## ● Relay Output Unit (Screwless Clamping Terminal Block, 12 mm Width) NX-OC2633

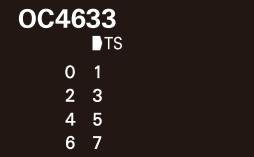
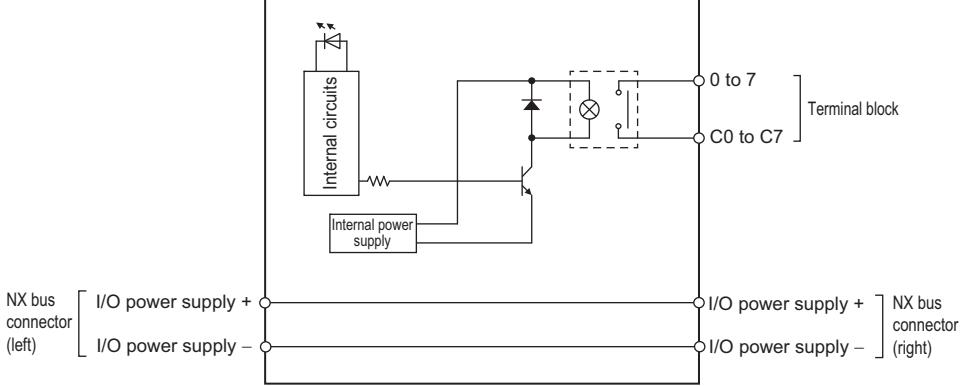
Unit name	Relay Output Units	Model	NX-OC2633
Number of points	2 points, independent contacts	External connection terminals	Screwless clamping terminal block (8 terminals)
I/O refreshing method	Free-Run refreshing		
Indicators	TS indicator, output indicator 	Relay type	N.O. contact
		Maximum switching capacity	250 VAC/2 A ( $\cos\phi = 1$ ), 250 VAC/2 A ( $\cos\phi = 0.4$ ), 24 VDC/2 A, 4 A/Unit
		Minimum switching capacity	5 VDC, 1 mA
Relay service life	Electrical: 100,000 operations* Mechanical: 20,000,000 operations	ON/OFF response time	15 ms max./15 ms max.
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Relay isolation
Insulation resistance	Between A1/B1 terminals and A3/B3 terminals: 20 MΩ min. (500 VDC) Between the external terminals and internal circuits: 20 MΩ min. (500 VDC) Between the internal circuit and GR terminal: 20 MΩ min. (100 VDC) Between the external terminals and GR terminal: 20 MΩ min. (500 VDC)	Dielectric strength	Between A1/B1 terminals and A3/B3 terminals: 2300 VAC for 1 min at a leakage current of 5 mA max. Between the external terminals and GR terminal: 2300 VAC for 1 min at a leakage current of 5 mA max. Between the external terminals and internal circuits: 2300 VAC for 1 min at a leakage current of 5 mA max. Between the internal circuit and GR terminal: 510 VAC for 1 min at a leakage current of 5 mA max.
Vibration resistance	Conforms to IEC60068-2-6. 5 to 8.4 Hz with amplitude of 3.5 mm, 8.4 to 150 Hz, acceleration of 9.8 m/s <sup>2</sup> 100 min each in X, Y, and Z directions (10 sweeps of 10 min each = 100 min total)	Shock resistance	100 m/s <sup>2</sup> , 3 times each in X, Y, and Z directions
I/O power supply method	Supply from external source	Current capacity of I/O power supply terminal	Without I/O power supply terminals
NX Unit power consumption	• Connected to a CPU Unit or Communication Control Unit 1.20 W max. • Connected to a Communications Coupler Unit 0.80 W max.	I/O current consumption	No consumption
Weight	65 g max.		
Circuit layout			
Installation orientation and restrictions	<p>Installation orientation:        • Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.        • Connected to a Communications Coupler Unit: Possible in 6 orientations.        Restrictions: No restrictions</p>		
Terminal connection diagram			
Disconnection/Short-circuit detection	Not supported.	Protective function	Not supported.

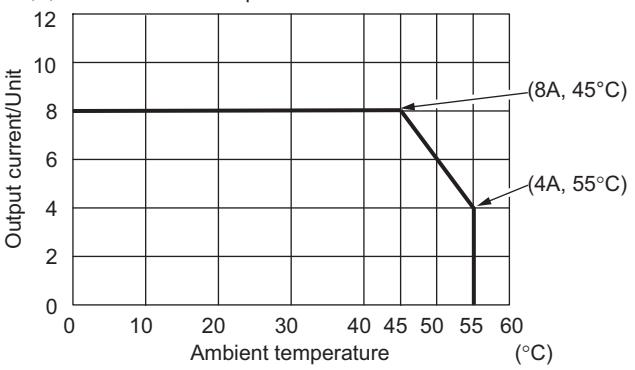
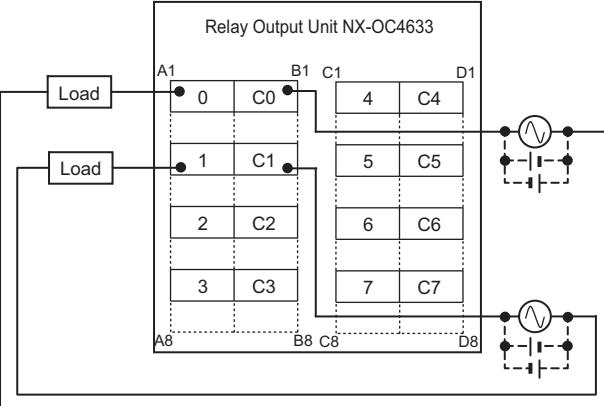
\* Electrical service life will vary depending on the current value. Refer to "NX-series Digital I/O Units User's Manual" for details.

## NX-OC2733

<b>Unit name</b>	Relay Output Unit	<b>Model</b>	NX-OC2733		
<b>Number of points</b>	2 points, independent contacts	<b>External connection terminals</b>	Screwless clamping terminal block (8 terminals)		
<b>I/O refreshing method</b>	Free-Run refreshing				
<b>Indicators</b>	TS indicator, output indicator 	<b>Maximum switching capacity</b>	250 VAC/2 A ( $\cos\phi = 1$ ), 250 VAC/2 A ( $\cos\phi = 0.4$ ), 24 VDC/2 A, 4 A/Unit		
		<b>Minimum switching capacity</b>	5 VDC, 10 mA		
<b>Relay service life</b>	Electrical: 100,000 operations Mechanical: 20,000,000 operations	<b>ON/OFF response time</b>	15 ms max./15 ms max.		
<b>Dimensions</b>	12 (W) x 100 (H) x 71 (D)	<b>Isolation method</b>	Relay isolation		
<b>Insulation resistance</b>	Between A1/3, B1/3 terminals and A5/7, B5/7 terminals: 20 MΩ min. (at 500 VDC) Between the external terminals and functional ground terminal: 20 MΩ min. (at 500 VDC) Between the external terminals and internal circuits: 20 MΩ min. (at 500 VDC) Between the internal circuit and the functional ground terminal: 20 MΩ min. (at 100 VDC)	<b>Dielectric strength</b>	Between A1/3, B1/3 terminals and A5/7, B5/7 terminals: 2300 VAC for 1 min at a leakage current of 5 mA max. Between the external terminals and the functional ground terminal: 2300 VAC for 1 min at a leakage current of 5 mA max. Between the external terminals and internal circuits: 2300 VAC for 1 min at a leakage current of 5 mA max. Between the internal circuit and the functional ground terminal: 510 VAC for 1 min at a leakage current of 5 mA max.		
<b>I/O power supply method</b>	Supply from external source	<b>Current capacity of I/O power supply terminal</b>	Without I/O power supply terminals		
<b>NX Unit power consumption</b>	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 1.30 W max.</li> <li>Connected to a Communications Coupler Unit 0.95 W max.</li> </ul>	<b>Current consumption from I/O power supply</b>	No consumption		
<b>Weight</b>	70 g max.				
<b>Circuit layout</b>	 <p>NO0 and NO1 are normal open contacts, and NC0 and NC1 are normal close contacts. You cannot replace the relay.</p>				
<b>Installation orientation and restrictions</b>	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: No restrictions</p>				
<b>Terminal connection diagram</b>					
<b>Disconnection/Short-circuit detection</b>	Not supported.	<b>Protective function</b>	Not supported.		

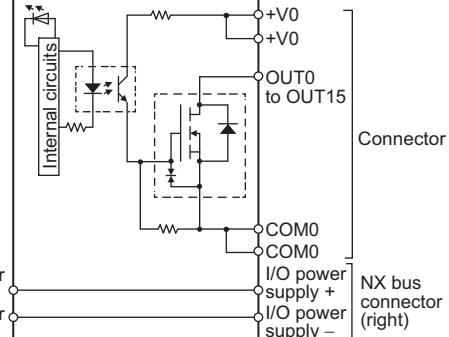
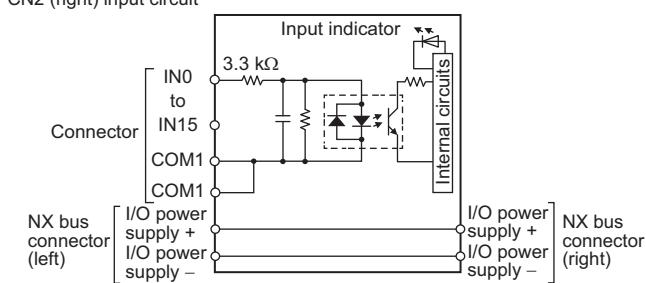
## ● Relay Output Unit (Screwless Clamping Terminal Block, 24 mm Width) NX-OC4633

<b>Unit name</b>	Relay Output Unit	<b>Model</b>	NX-OC4633
<b>Number of points</b>	8 points, independent contacts	<b>External connection terminals</b>	Screwless clamping terminal block (8 terminals x 2)
<b>I/O refreshing method</b>	Free-Run refreshing		
<b>Indicators</b>	TS indicator, output indicator 	<b>Relay type</b>	N.O. contact
	<b>Maximum switching capacity</b>	250 VAC/2 A ( $\cos\phi = 1$ ), 250 VAC/2 A ( $\cos\phi = 0.4$ ), 24 VDC/2 A, 8 A/Unit	
	<b>Minimum switching capacity</b>	5 VDC, 1 mA	
<b>Relay service life</b>	Electrical: 100,000 operations* Mechanical: 20,000,000 operations	<b>ON/OFF response time</b>	15 ms max./15 ms max.
<b>Dimensions</b>	24 (W) x 100 (H) x 71 (D)	<b>Isolation method</b>	Relay isolation
<b>Insulation resistance</b>	Between output bits: 20 MΩ min. (at 500 VDC) Between the external terminals and the functional ground terminal: 20 MΩ min. (at 500 VDC) Between the external terminals and internal circuits: 20 MΩ min. (at 500 VDC) Between the internal circuit and the functional ground terminal: 20 MΩ min. (at 100 VDC)	<b>Dielectric strength</b>	Between output bits: 2300 VAC for 1 min at a leakage current of 5 mA max. Between the external terminals and the functional ground terminal: 2300 VAC for 1 min at a leakage current of 5 mA max. Between the external terminals and internal circuits: 2300 VAC for 1 min at a leakage current of 5 mA max. Between the internal circuit and the functional ground terminal: 510 VAC for 1 min at a leakage current of 5 mA max.
<b>Vibration resistance</b>	Conforms to IEC 60068-2-6. 5 to 8.4 Hz with amplitude of 3.5 mm, 8.4 to 150 Hz, acceleration of 9.8 m/s <sup>2</sup> 100 min each in X, Y, and Z directions (10 sweeps of 10 min each = 100 min total)	<b>Shock resistance</b>	100 m/s <sup>2</sup> , 3 times each in X, Y, and Z directions
<b>I/O power supply method</b>	Supply from external source	<b>Current capacity of I/O power supply terminal</b>	Without I/O power supply terminals
<b>NX Unit power consumption</b>	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 2.00 W max.</li> <li>Connected to a Communications Coupler Unit 1.65 W max.</li> </ul>	<b>Current consumption from I/O power supply</b>	No consumption
<b>Weight</b>	140 g max.		
<b>Circuit layout</b>	 <p>You cannot replace the relay.</p>		

<b>Installation orientation and restrictions</b>	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: As shown in the following.</p> <p>(A) Output current/Unit - Ambient temperature characteristics</p>  <table border="1"> <caption>Data points from Graph (A)</caption> <thead> <tr> <th>Ambient temperature (°C)</th> <th>Output current (A)</th> </tr> </thead> <tbody> <tr> <td>0 - 45</td> <td>8</td> </tr> <tr> <td>55</td> <td>4</td> </tr> </tbody> </table>	Ambient temperature (°C)	Output current (A)	0 - 45	8	55	4
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55	4						
<b>Terminal connection diagram</b>							

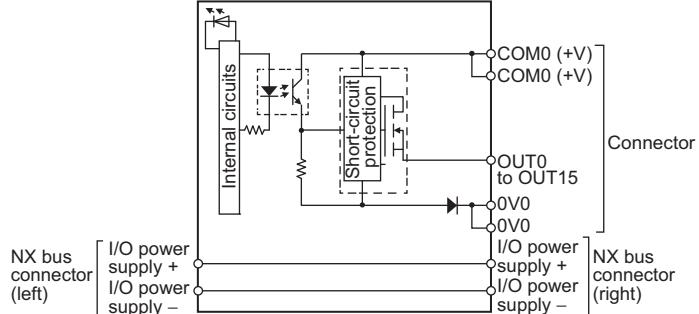
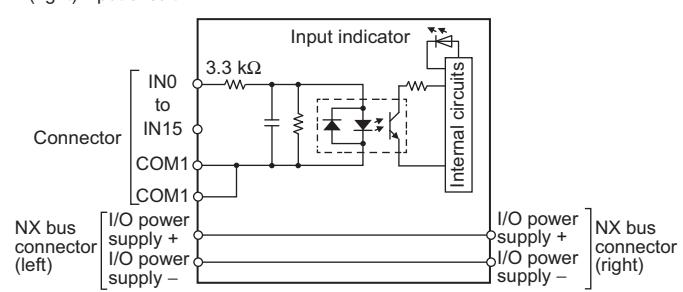
\* Electrical service life will vary depending on the current value. Refer to "NX-series Digital I/O Units User's Manual" for details.

● DC Input/Transistor Output Unit (MIL Connector, 30 mm Width)  
NX-MD6121-5

Unit name	DC Input/Transistor Output Unit	Model	NX-MD6121-5	
Number of points	16 inputs/16 outputs	External connection terminals	2 MIL connectors (20 terminals)	
I/O refreshing method	Switching Synchronous I/O refreshing and Free-Run refreshing			
Output section (CN1)	Internal I/O common	NPN	<b>Input section (CN2)</b> <b>Internal I/O common</b> For both NPN/PNP <b>Rated input voltage</b> 24 VDC (15 to 28.8 VDC) <b>Input current</b> 7 mA typical (at 24 VDC) <b>ON voltage/ON current</b> 15 VDC min./3 mA min. (between COM and each signal) <b>OFF voltage/OFF current</b> 5 VDC max./1 mA max. (between COM and each signal) <b>ON/OFF response time</b> 20 $\mu$ s max./400 $\mu$ s max. <b>Input filter time</b> No filter, 0.25 ms, 0.5 ms, 1 ms (default), 2 ms, 4 ms, 8 ms, 16 ms, 32 ms, 64 ms, 128 ms, 256 ms	
	Rated voltage	12 to 24 VDC		
	Operating load voltage range	10.2 to 28.8 VDC		
	Maximum value of load current	0.5 A/point, 2 A/Unit		
	Maximum inrush current	4.0 A/point, 10 ms max.		
	Leakage current	0.1 mA max.		
	Residual voltage	1.5 V max.		
	ON/OFF response time	0.1 ms max./0.8 ms max.		
Indicators	TS indicator, I/O indicators			
				
	<b>Dimensions</b> 30 (W) x 100 (H) x 71 (D) <b>Isolation method</b> Photocoupler isolation <b>Insulation resistance</b> 20 M $\Omega$ min. between isolated circuits (at 100 VDC) <b>Dielectric strength</b> 510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max. <b>I/O power supply method</b> Supply from external source <b>Current capacity of I/O power supply terminal</b> Without I/O power supply terminals			
	<b>NX Unit power consumption</b> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 1.00 W max.</li> <li>Connected to a Communications Coupler Unit 0.70 W max.</li> </ul>			
	<b>Current consumption from I/O power supply</b> 30 mA max.			
	<b>Weight</b> 105 g max.			
	<b>CN1 (left) output circuit</b> 			
	<b>CN2 (right) input circuit</b> 			
	<b>Circuit layout</b>			

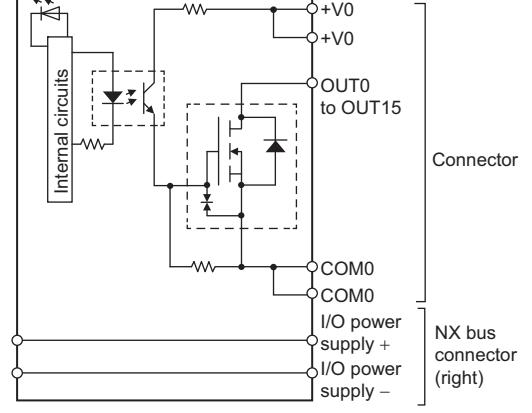
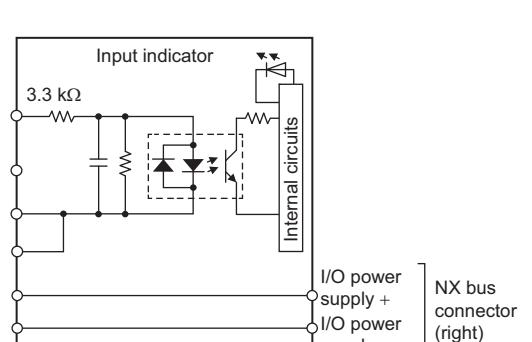
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<b>Disconnection/Short-circuit detection</b>	Not supported.	<b>Protective function</b>	Not supported.																																																																																						

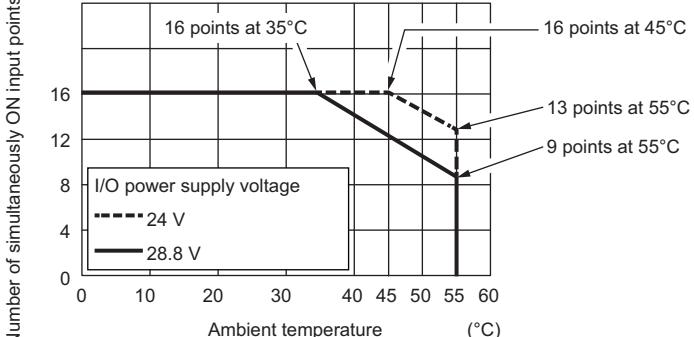
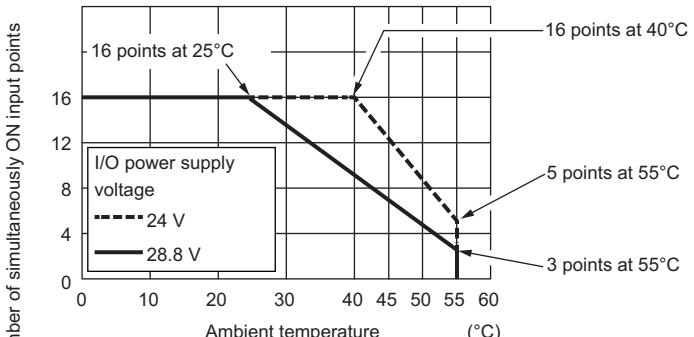
## NX-MD6256-5

Unit name	DC Input/Transistor Output Unit	Model	NX-MD6256-5			
Number of points	16 inputs/16 outputs	External connection terminals	2 MIL connectors (20 terminals)			
I/O refreshing method	Switching Synchronous I/O refreshing and Free-Run refreshing					
Output section (CN1)	Internal I/O common	PNP	Input section (CN2)	Internal I/O common	For both NPN/PNP	
	Rated voltage	24 VDC		Rated input voltage	24 VDC (15 to 28.8 VDC)	
	Operating load voltage range	20.4 to 28.8 VDC		Input current	7 mA typical (at 24 VDC)	
	Maximum value of load current	0.5 A/point, 2 A/Unit		ON voltage/ON current	15 VDC min./3 mA min. (between COM and each signal)	
	Maximum inrush current	4.0 A/point, 10 ms max.		OFF voltage/OFF current	5 VDC max./1 mA max. (between COM and each signal)	
	Leakage current	0.1 mA max.		ON/OFF response time	20 $\mu$ s max./400 $\mu$ s max.	
	Residual voltage	1.5 V max.		Input filter time	No filter, 0.25 ms, 0.5 ms, 1 ms (default), 2 ms, 4 ms, 8 ms, 16 ms, 32 ms, 64 ms, 128 ms, 256 ms	
	ON/OFF response time	0.5 ms max./1.0 ms max.				
Indicators	TS indicator, I/O indicators			Dimensions	30 (W) x 100 (H) x 71 (D)	
				Isolation method	Photocoupler isolation	
				Insulation resistance	20 M $\Omega$ min. between isolated circuits (at 100 VDC)	
				Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.	
				I/O power supply method	Supply from external source	
				Current capacity of I/O power supply terminal	Without I/O power supply terminals	
					<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 1.10 W max.</li> <li>Connected to a Communications Coupler Unit 0.75 W max.</li> </ul>	
				NX Unit power consumption	40 mA max.	
				Weight	110 g max.	
Circuit layout	CN1 (left) output circuit					
	CN2 (right) input circuit					

<b>Installation orientation and restrictions</b>	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: As shown in the following.</p> <ul style="list-style-type: none"> <li>For upright installation</li> </ul> <p>Number of simultaneously ON input points vs. Ambient temperature characteristic</p> <table border="1"> <caption>Data for Upright Installation Graph</caption> <thead> <tr> <th>Ambient temperature (°C)</th> <th>16 points at 35°C (28.8 V)</th> <th>16 points at 45°C (28.8 V)</th> <th>13 points at 55°C (24 V)</th> <th>9 points at 55°C (24 V)</th> </tr> </thead> <tbody> <tr> <td>35</td> <td>16</td> <td>16</td> <td>16</td> <td>16</td> </tr> <tr> <td>45</td> <td>16</td> <td>16</td> <td>13</td> <td>13</td> </tr> <tr> <td>55</td> <td>9</td> <td>9</td> <td>13</td> <td>13</td> </tr> </tbody> </table> <p>I/O power supply voltage — 28.8 V - - - 24 V</p> <ul style="list-style-type: none"> <li>For any installation other than upright</li> </ul> <p>Number of simultaneously ON input points vs. Ambient temperature characteristic</p> <table border="1"> <caption>Data for Non-Upright Installation Graph</caption> <thead> <tr> <th>Ambient temperature (°C)</th> <th>16 points at 25°C (28.8 V)</th> <th>16 points at 40°C (28.8 V)</th> <th>5 points at 55°C (24 V)</th> <th>3 points at 55°C (24 V)</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>16</td> <td>16</td> <td>16</td> <td>16</td> </tr> <tr> <td>40</td> <td>16</td> <td>16</td> <td>16</td> <td>16</td> </tr> <tr> <td>55</td> <td>3</td> <td>3</td> <td>5</td> <td>5</td> </tr> </tbody> </table> <p>I/O power supply voltage — 28.8 V - - - 24 V</p>	Ambient temperature (°C)	16 points at 35°C (28.8 V)	16 points at 45°C (28.8 V)	13 points at 55°C (24 V)	9 points at 55°C (24 V)	35	16	16	16	16	45	16	16	13	13	55	9	9	13	13	Ambient temperature (°C)	16 points at 25°C (28.8 V)	16 points at 40°C (28.8 V)	5 points at 55°C (24 V)	3 points at 55°C (24 V)	25	16	16	16	16	40	16	16	16	16	55	3	3	5	5																																																
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OUT5	OUT5	10 9	OUT13																																																																																						
OUT6	OUT6	8 7	OUT14																																																																																						
OUT7	OUT7	6 5	OUT15																																																																																						
COM0 (+V)	COM0 (+V)	4 3	COM0 (+V)																																																																																						
0V0	0V0	2 1	0V0																																																																																						
Signal name	Connector name	Pin	Signal name																																																																																						
NC	NC	1 2	NC																																																																																						
COM1	COM1	3 4	COM1																																																																																						
IN15		5 6	IN07																																																																																						
IN14		7 8	IN06																																																																																						
IN13		9 10	IN05																																																																																						
IN12		11 12	IN04																																																																																						
IN11		13 14	IN03																																																																																						
IN10		15 16	IN02																																																																																						
IN09		17 18	IN01																																																																																						
IN08		19 20	IN00																																																																																						
<b>Disconnection/Short-circuit detection</b>	<p>Not supported.</p> <p><b>Protective function</b></p> <p>With load short-circuit protection.</p>																																																																																								

● DC Input/Transistor Output Unit (Fujitsu/OTAX Connector, 30 mm Width)  
**NX-MD6121-6**

Unit name	DC Input/Transistor Output Unit	Model	NX-MD6121-6			
Number of points	16 inputs/16 outputs	External connection terminals	2 Fujitsu/OTAX connectors (24 terminals)			
I/O refreshing method	Switching Synchronous I/O refreshing and Free-Run refreshing					
Output section (CN1)	Internal I/O common	NPN	Input section (CN2)	Internal I/O common	For both NPN/PNP	
	Rated voltage	12 to 24 VDC		Rated input voltage	24 VDC (15 to 28.8 VDC)	
	Operating load voltage range	10.2 to 28.8 VDC		Input current	7 mA typical (at 24 VDC)	
	Maximum value of load current	0.5 A/point, 2 A/Unit		ON voltage/ON current	15 VDC min./3 mA min. (between COM and each signal)	
	Maximum inrush current	4.0 A/point, 10 ms max.		OFF voltage/OFF current	5 VDC max./1 mA max. (between COM and each signal)	
	Leakage current	0.1 mA max.		ON/OFF response time	20 µs max./400 µs max.	
	Residual voltage	1.5 V max.		Input filter time	No filter, 0.25 ms, 0.5 ms, 1 ms (default), 2 ms, 4 ms, 8 ms, 16 ms, 32 ms, 64 ms, 128 ms, 256 ms	
	ON/OFF response time	0.1 ms max./0.8 ms max.				
Indicators	TS indicator, I/O indicators			Dimensions	30 (W) x 100 (H) x 71 (D)	
				Isolation method	Photocoupler isolation	
				Insulation resistance	20 MΩ min. between isolated circuits (at 100 VDC)	
				Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.	
				I/O power supply method	Supply from external source	
				Current capacity of I/O power supply terminal	Without I/O power supply terminals	
				NX Unit power consumption	<ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit 1.00 W max.</li> <li>Connected to a Communications Coupler Unit 0.70 W max.</li> </ul>	
				Current consumption from I/O power supply	30 mA max.	
				Weight	95 g max.	
Circuit layout	CN1 (left) output circuit					
	CN2 (right) input circuit					

<b>Installation orientation and restrictions</b>	<p>Installation orientation:</p> <ul style="list-style-type: none"> <li>Connected to a CPU Unit or Communication Control Unit: Possible in upright installation.</li> <li>Connected to a Communications Coupler Unit: Possible in 6 orientations.</li> </ul> <p>Restrictions: As shown in the following.</p> <ul style="list-style-type: none"> <li>For upright installation</li> </ul> <p>Number of simultaneously ON input points vs. Ambient temperature characteristic</p>  <table border="1"> <caption>Data for Upright Installation Graph</caption> <thead> <tr> <th>Ambient temperature (°C)</th> <th>28.8 V (points)</th> <th>24 V (points)</th> </tr> </thead> <tbody> <tr><td>35</td><td>16</td><td>16</td></tr> <tr><td>45</td><td>16</td><td>13</td></tr> <tr><td>55</td><td>9</td><td>13</td></tr> </tbody> </table> <p>I/O power supply voltage</p> <ul style="list-style-type: none"> <li>24 V</li> <li>28.8 V</li> </ul> <p>Number of simultaneously ON input points</p> <p>Ambient temperature (°C)</p> <ul style="list-style-type: none"> <li>For any installation other than upright</li> </ul> <p>Number of simultaneously ON input points vs. Ambient temperature characteristic</p>  <table border="1"> <caption>Data for Non-Upright Installation Graph</caption> <thead> <tr> <th>Ambient temperature (°C)</th> <th>28.8 V (points)</th> <th>24 V (points)</th> </tr> </thead> <tbody> <tr><td>25</td><td>16</td><td>16</td></tr> <tr><td>40</td><td>16</td><td>16</td></tr> <tr><td>55</td><td>3</td><td>5</td></tr> </tbody> </table> <p>I/O power supply voltage</p> <ul style="list-style-type: none"> <li>24 V</li> <li>28.8 V</li> </ul> <p>Number of simultaneously ON input points</p> <p>Ambient temperature (°C)</p>	Ambient temperature (°C)	28.8 V (points)	24 V (points)	35	16	16	45	16	13	55	9	13	Ambient temperature (°C)	28.8 V (points)	24 V (points)	25	16	16	40	16	16	55	3	5
Ambient temperature (°C)	28.8 V (points)	24 V (points)																							
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Ambient temperature (°C)	28.8 V (points)	24 V (points)																							
25	16	16																							
40	16	16																							
55	3	5																							

<p><b>Terminal connection diagram</b></p>	<p><b>CN1 (left) output terminal</b></p> <table border="1" data-bbox="470 314 1017 741"> <thead> <tr> <th>Signal name</th><th>Connector pin</th><th>Signal name</th></tr> <tr> <th></th><th>B A</th><th></th></tr> </thead> <tbody> <tr> <td>NC</td><td>B12 A12</td><td>NC</td></tr> <tr> <td>NC</td><td>B11 A11</td><td>NC</td></tr> <tr> <td>+V0</td><td>B10 A10</td><td>+V0</td></tr> <tr> <td>COM0</td><td>B9 A9</td><td>COM0</td></tr> <tr> <td>OUT15</td><td>B8 A8</td><td>OUT7 L</td></tr> <tr> <td>OUT14</td><td>B7 A7</td><td>OUT6 L</td></tr> <tr> <td>OUT13</td><td>B6 A6</td><td>OUT5 L</td></tr> <tr> <td>OUT12</td><td>B5 A5</td><td>OUT4 L</td></tr> <tr> <td>OUT11</td><td>B4 A4</td><td>OUT3 L</td></tr> <tr> <td>OUT10</td><td>B3 A3</td><td>OUT2 L</td></tr> <tr> <td>OUT9</td><td>B2 A2</td><td>OUT1 L</td></tr> <tr> <td>OUT8</td><td>B1 A1</td><td>OUT0 L</td></tr> </tbody> </table> <p>12 to 24 VDC</p> <ul style="list-style-type: none"> <li>• Be sure to wire both pins A9 and B9 (COM0) of CN1.</li> <li>• Be sure to wire both pins A10 and B10 (+V0) of CN1.</li> </ul> <p><b>CN2 (right) input terminal</b></p> <table border="1" data-bbox="470 741 1017 1286"> <thead> <tr> <th>Signal name</th><th>Connector pin</th><th>Signal name</th></tr> <tr> <th></th><th>A B</th><th></th></tr> </thead> <tbody> <tr> <td>IN0</td><td>A1 B1</td><td>IN8</td></tr> <tr> <td>IN1</td><td>A2 B2</td><td>IN9</td></tr> <tr> <td>IN2</td><td>A3 B3</td><td>IN10</td></tr> <tr> <td>IN3</td><td>A4 B4</td><td>IN11</td></tr> <tr> <td>IN4</td><td>A5 B5</td><td>IN12</td></tr> <tr> <td>IN5</td><td>A6 B6</td><td>IN13</td></tr> <tr> <td>IN6</td><td>A7 B7</td><td>IN14</td></tr> <tr> <td>IN7</td><td>A8 B8</td><td>IN15</td></tr> <tr> <td>COM1</td><td>A9 B9</td><td>COM1</td></tr> <tr> <td>NC</td><td>A10 B10</td><td>NC</td></tr> <tr> <td>NC</td><td>A11 B11</td><td>NC</td></tr> <tr> <td>NC</td><td>A12 B12</td><td>NC</td></tr> </tbody> </table> <p>24 VDC</p> <ul style="list-style-type: none"> <li>• The polarity of the input power supply of CN2 can be connected in either direction.</li> <li>• Be sure to wire both pins A9 and B9 (COM1) of CN2, and set the same polarity for both pins.</li> </ul>	Signal name	Connector pin	Signal name		B A		NC	B12 A12	NC	NC	B11 A11	NC	+V0	B10 A10	+V0	COM0	B9 A9	COM0	OUT15	B8 A8	OUT7 L	OUT14	B7 A7	OUT6 L	OUT13	B6 A6	OUT5 L	OUT12	B5 A5	OUT4 L	OUT11	B4 A4	OUT3 L	OUT10	B3 A3	OUT2 L	OUT9	B2 A2	OUT1 L	OUT8	B1 A1	OUT0 L	Signal name	Connector pin	Signal name		A B		IN0	A1 B1	IN8	IN1	A2 B2	IN9	IN2	A3 B3	IN10	IN3	A4 B4	IN11	IN4	A5 B5	IN12	IN5	A6 B6	IN13	IN6	A7 B7	IN14	IN7	A8 B8	IN15	COM1	A9 B9	COM1	NC	A10 B10	NC	NC	A11 B11	NC	NC	A12 B12	NC
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<p><b>Disconnection/Short-circuit detection</b></p>	<table border="1" data-bbox="390 1286 1345 1419"> <tr> <td data-bbox="390 1286 843 1419">Not supported.</td><td data-bbox="843 1286 1105 1419"><b>Protective function</b></td><td data-bbox="1105 1286 1345 1419">Not supported.</td></tr> </table>	Not supported.	<b>Protective function</b>	Not supported.																																																																																	
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## Version Information

### Connected to a CPU Unit

Refer to the user's manual for the CPU Unit for details on the CPU Units to which NX Units can be connected.

NX Unit		Corresponding unit versions/versions	
Model	Unit version	CPU Unit	Sysmac Studio
NX-ID3317			
NX-ID3343			
NX-ID3344			
NX-ID3417			
NX-ID3443			
NX-ID3444			
NX-ID4342			
NX-ID4442			Ver.1.17
NX-ID5142-1			
NX-ID5142-5			
NX-ID5342			
NX-ID5442			
NX-ID6142-5			
NX-ID6142-6			
NX-ID6342			
NX-ID6442			Ver.1.54
NX-IA3117			
NX-OD2154			
NX-OD2258			
NX-OD3121			
NX-OD3153			
NX-OD3256	Ver.1.0	Ver.1.13	
NX-OD3257			
NX-OD3268			
NX-OD4121			Ver.1.17
NX-OD4256			
NX-OD5121			
NX-OD5121-1			
NX-OD5121-5			
NX-OD5256			
NX-OD5256-1			
NX-OD5256-5			
NX-OD6121			Ver.1.54
NX-OD6121-5			
NX-OD6121-6			Ver.1.17
NX-OD6256			
NX-OD6256-5			Ver.1.54
NX-OC2633			
NX-OC2733			
NX-OC4633			
NX-MD6121-5			Ver.1.17
NX-MD6121-6			
NX-MD6256-5			

**Note:** Some Units do not have all of the versions given in the above table. If a Unit does not have the specified version, support is provided by the oldest available version after the specified version. Refer to the user's manuals for the specific Units for the relation between models and versions.

## Connected to an EtherCAT Coupler Unit

NX Unit		Corresponding unit versions/versions		
Model	Unit version	EtherCAT Coupler Unit	CPU Unit or Industrial PC	Sysmac Studio
NX-ID3317	Ver.1.0	Ver.1.0	Ver.1.05	Ver.1.06
NX-ID3343		Ver.1.1	Ver.1.06 *	Ver.1.07
NX-ID3344		Ver.1.0	Ver.1.05	Ver.1.06
NX-ID3417		Ver.1.1	Ver.1.06 *	Ver.1.07
NX-ID3443		Ver.1.0	Ver.1.05	Ver.1.06
NX-ID3444				Ver.1.13
NX-ID4342				Ver.1.10
NX-ID4442				Ver.1.06
NX-ID5142-1				Ver.1.10
NX-ID5142-5				Ver.1.13
NX-ID5342				Ver.1.06
NX-ID5442				Ver.1.10
NX-ID6142-5				Ver.1.13
NX-ID6142-6				Ver.1.54
NX-ID6342				Ver.1.08
NX-ID6442				Ver.1.07
NX-IA3117				Ver.1.06
NX-OD2154	Ver.1.0	Ver.1.1	Ver.1.06 *	Ver.1.07
NX-OD2258		Ver.1.0	Ver.1.05	Ver.1.06
NX-OD3121				Ver.1.13
NX-OD3153				Ver.1.06
NX-OD3256				Ver.1.10
NX-OD3257				Ver.1.13
NX-OD3268				Ver.1.06
NX-OD4121				Ver.1.13
NX-OD4256				Ver.1.10
NX-OD5121				Ver.1.06
NX-OD5121-1				Ver.1.10
NX-OD5121-5				Ver.1.13
NX-OD5256				Ver.1.06
NX-OD5256-1				Ver.1.13
NX-OD5256-5				Ver.1.10
NX-OD6121	Ver.1.0	Ver.1.0	Ver.1.05	Ver.1.54
NX-OD6121-5				Ver.1.10
NX-OD6121-6				Ver.1.13
NX-OD6256				Ver.1.54
NX-OD6256-5				Ver.1.10
NX-OC2633				Ver.1.06
NX-OC2733				Ver.1.08
NX-OC4633				Ver.1.17
NX-MD6121-5				Ver.1.10
NX-MD6121-6				Ver.1.13
NX-MD6256-5				Ver.1.10

**Note:** Some Units do not have all of the versions given in the above table. If a Unit does not have the specified version, support is provided by the oldest available version after the specified version. Refer to the user's manuals for the specific Units for the relation between models and versions.

\* The instructions for time stamp refreshing are supported by CPU Units with unit version 1.06 or later. If you do not use instructions for time stamp refreshing, you can use version 1.05. Refer to the *NJ/NX-series Instructions Reference Manual* (Cat. No. W502) for details on the instructions for time stamp refreshing.

## Connected to an EtherNet/IP Coupler Unit

NX Unit		Corresponding unit versions/versions					
Model	Unit version	Application with an NJ/NX/NY-series Controller *1			Application with a CS/CJ/CP-series PLC *2		
		EtherNet/IP Coupler Unit	CPU Unit or Industrial PC	Sysmac Studio	EtherNet/IP Coupler Unit	Sysmac Studio	NX-IO Configurator *3
NX-ID3317	Ver. 1.0	Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	Ver. 1.10	Ver. 1.00
NX-ID3343		---	---	---	---	---	---
NX-ID3344		Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	Ver. 1.10	Ver. 1.00
NX-ID3417		---	---	---	---	---	---
NX-ID3443		Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	Ver. 1.10	Ver. 1.00
NX-ID3444		---	---	---	---	---	---
NX-ID4342		Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	Ver. 1.10	Ver. 1.00
NX-ID4442		---	---	---	---	Ver. 1.13	
NX-ID5142-1		Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	Ver. 1.10	
NX-ID5142-5		---	---	---	---	Ver. 1.13	
NX-ID5342		Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	Ver. 1.10	
NX-ID5442		---	---	Ver. 1.54	Ver. 1.0	Ver. 1.13	Ver. 1.23
NX-ID6142-5		Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	Ver. 1.10	
NX-ID6142-6		---	---	---	---	Ver. 1.54	
NX-ID6342		Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	Ver. 1.10	
NX-ID6442		---	---	---	---	Ver. 1.00	
NX-IA3117		Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	Ver. 1.00	Ver. 1.00
NX-OD2154		---	---	---	---	---	
NX-OD2258		Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	Ver. 1.10	
NX-OD3121		---	---	---	---	Ver. 1.13	
NX-OD3153		Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	Ver. 1.10	
NX-OD3256		---	---	---	---	Ver. 1.13	
NX-OD3257		Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	Ver. 1.10	
NX-OD3268		---	---	---	---	Ver. 1.13	
NX-OD4121		Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	Ver. 1.10	
NX-OD4256		---	---	---	---	Ver. 1.13	
NX-OD5121		Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	Ver. 1.10	Ver. 1.00
NX-OD5121-1		---	---	---	---	Ver. 1.13	
NX-OD5121-5		Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	Ver. 1.10	
NX-OD5256		---	---	---	---	Ver. 1.13	
NX-OD5256-1		Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	Ver. 1.10	
NX-OD5256-5		---	---	---	---	Ver. 1.13	Ver. 1.00
NX-OD6121		Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	Ver. 1.10	
NX-OD6121-5		---	---	---	---	Ver. 1.10	
NX-OD6121-6		Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	Ver. 1.13	
NX-OD6256		---	---	---	---	Ver. 1.10	
NX-OD6256-5		Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	Ver. 1.14	
NX-OC2633		---	---	---	---	Ver. 1.10	Ver. 1.00
NX-OC2733		Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	Ver. 1.17	
NX-OC4633		---	---	---	---	Ver. 1.10	
NX-MD6121-5		Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	Ver. 1.13	
NX-MD6121-6		---	---	---	---	Ver. 1.10	
NX-MD6256-5		Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	Ver. 1.10	Ver. 1.00

**Note:** 1. Some Units do not have all of the versions given in the above table. If a Unit does not have the specified version, support is provided by the oldest available version after the specified version. Refer to the user's manuals for the specific Units for the relation between models and versions.

2. Note: You cannot connect the relevant NX Unit to the target Communications Coupler Unit if "—" is shown in the corresponding unit versions/versions column.

\*1 Refer to the user's manual for the EtherNet/IP Coupler Units for information on the unit versions of EtherNet/IP Units that are compatible with EtherNet/IP Coupler Units.

\*2 Refer to the user's manual for the EtherNet/IP Coupler Units for information on the unit versions of CPU Units and EtherNet/IP Units that are compatible with EtherNet/IP Coupler Units.

\*3 For connection to an EtherNet/IP Coupler Unit with unit version 1.0, connection is supported only for a connection to the peripheral USB port on the EtherNet/IP Coupler Unit. You cannot connect by any other path. If you need to connect by another path, use an EtherNet/IP Coupler Unit with unit version 1.2 or later.

## Connected to Communication Control Units

NX Unit		Corresponding unit versions/versions	
Model	Unit version	Communication Control Unit	Sysmac Studio
NX-ID3317	Ver. 1.0	Ver. 1.00	Ver. 1.24
NX-ID3343		---	---
NX-ID3344		Ver. 1.00	Ver. 1.24
NX-ID3417		---	---
NX-ID3443		---	---
NX-ID3444		---	---
NX-ID4342		Ver. 1.00	Ver. 1.24
NX-ID4442		Ver. 1.54	Ver. 1.24
NX-ID5142-1		Ver. 1.24	Ver. 1.24
NX-ID5142-5		---	---
NX-ID5342	Ver. 1.0	Ver. 1.00	Ver. 1.24
NX-ID5442		Ver. 1.54	Ver. 1.24
NX-ID6142-5		Ver. 1.24	Ver. 1.24
NX-ID6142-6		---	---
NX-ID6342		Ver. 1.00	Ver. 1.24
NX-ID6442		Ver. 1.54	Ver. 1.24
NX-IA3117		Ver. 1.24	Ver. 1.24
NX-OD2154		---	---
NX-OD2258		Ver. 1.00	Ver. 1.24
NX-OD3121		Ver. 1.54	Ver. 1.24
NX-OD3153	Ver. 1.0	Ver. 1.24	Ver. 1.24
NX-OD3256		Ver. 1.24	Ver. 1.24
NX-OD3257		Ver. 1.24	Ver. 1.24
NX-OD3268		Ver. 1.24	Ver. 1.24
NX-OD4121		Ver. 1.24	Ver. 1.24
NX-OD4256		Ver. 1.24	Ver. 1.24
NX-OD5121		Ver. 1.24	Ver. 1.24
NX-OD5121-1		Ver. 1.24	Ver. 1.24
NX-OD5121-5		Ver. 1.24	Ver. 1.24
NX-OD5256		Ver. 1.24	Ver. 1.24
NX-OD5256-1	Ver. 1.0	Ver. 1.24	Ver. 1.24
NX-OD5256-5		Ver. 1.24	Ver. 1.24
NX-OD6121		Ver. 1.24	Ver. 1.24
NX-OD6121-5		Ver. 1.24	Ver. 1.24
NX-OD6121-6		Ver. 1.24	Ver. 1.24
NX-OD6256		Ver. 1.24	Ver. 1.24
NX-OD6256-5		Ver. 1.24	Ver. 1.24
NX-OC2633		Ver. 1.24	Ver. 1.24
NX-OC2733		Ver. 1.24	Ver. 1.24
NX-OC4633		Ver. 1.24	Ver. 1.24
NX-MD6121-5	Ver. 1.0	Ver. 1.24	Ver. 1.24
NX-MD6121-6		Ver. 1.24	Ver. 1.24
NX-MD6256-5		Ver. 1.24	Ver. 1.24

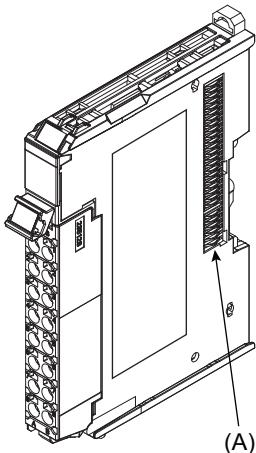
**Note:** 1. Some Units do not have all of the versions given in the above table. If a Unit does not have the specified version, support is provided by the oldest available version after the specified version. Refer to the user's manuals for the specific Units for the relation between models and versions.

2. Note: You cannot connect the relevant NX Unit to the Communication Control Unit if "—" is shown in the corresponding unit versions/versions column.

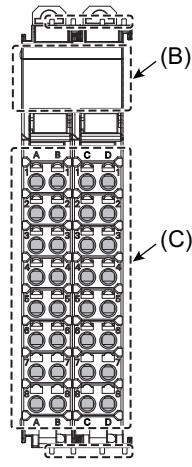
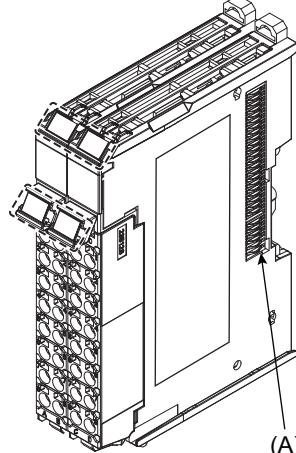
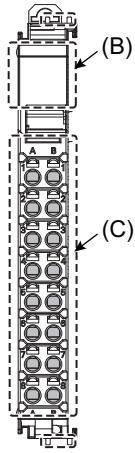
## External Interface

### Screwless Clamping Terminal Block Type

12 mm Width

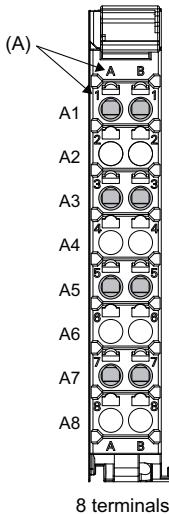


24 mm Width

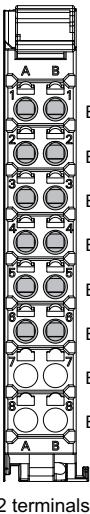


Letter	Item	Specification
(A)	NX bus connector	This connector is used to connect to another Unit.
(B)	Indicators	The indicators show the current operating status of the Unit.
(C)	Terminal block	The terminal block is used to connect to external devices. The number of terminals depends on the Unit.

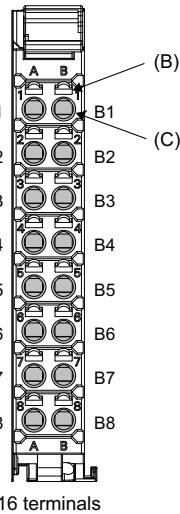
#### Terminal Blocks



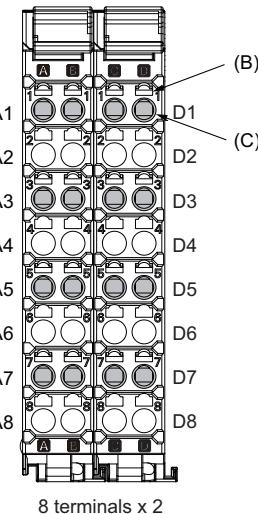
8 terminals



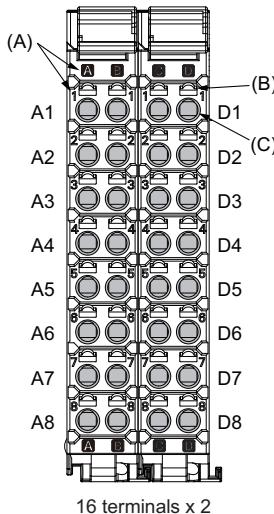
12 terminals



16 terminals



8 terminals x 2



16 terminals x 2

Letter	Item	Specification
(A)	Terminal number indication	The terminal number is identified by a column (A through D) and a row (1 through 8). Therefore, terminal numbers are written as a combination of columns and rows, A1 through A8 and B1 through B8. The terminal number indication is the same regardless of the number of terminals on the terminal block.
(B)	Release hole	A flat-blade screwdriver is inserted here to attach and remove the wiring.
(C)	Terminal hole	The wires are inserted into these holes.

**Applicable Terminal Blocks for Each Unit Model**

Unit model	Terminal Blocks			
	Model	No. of terminals	Ground terminal mark	Terminal current capacity
NX-ID3□□□	NX-TBA122	12	None	10 A
NX-ID4□□□	NX-TBA162	16	None	10 A
NX-ID5□□□	NX-TBA162	16	None	10 A
NX-ID6□□□	NX-TBA162	16	None	10 A
NX-ID6□□□	NX-TBB162	16	None	10 A
NX-IA3117	NX-TBA082	8	None	10 A
NX-OD2□□□	NX-TBA082	8	None	10 A
NX-OD3□□□ (any model other than NX-OD3268)	NX-TBA122	12	None	10 A
NX-OD3268 NX-OD4□□□	NX-TBA162	16	None	10 A
NX-OD5□□□	NX-TBA162	16	None	10 A
NX-OD6□□□	NX-TBA162	16	None	10 A
NX-OD6□□□	NX-TBB162	16	None	10 A
NX-OC2□□□	NX-TBA082	8	None	10 A
NX-OC4633 *1	NX-TBA082	8	None	10 A

\*1. Use the NX-TBA082 in both the A/B and C/D columns for the NX-OC4633. In such situations, the column number display on the terminal block will be for the A/B columns even in the C/D columns.

## Applicable Wires

### Using Ferrules

If you use ferrules, attach the twisted wires to them.

Observe the application instructions for your ferrules for the wire stripping length when attaching ferrules.

Always use plated one-pin ferrules. Do not use unplated ferrules or two-pin ferrules.

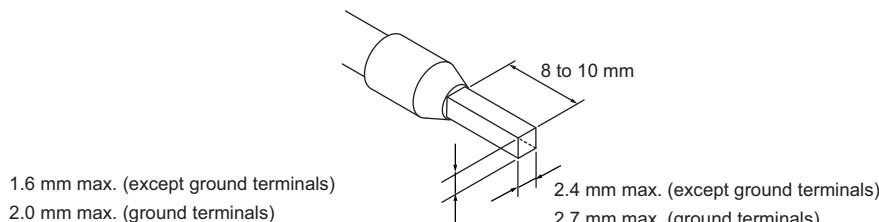
The applicable ferrules, wires, and crimping tools are listed in the following table.

Terminal type	Manufacturer	Ferrule model	Applicable wire (mm <sup>2</sup> (AWG))	Crimping tool	
Terminals other than ground terminals	Phoenix Contact	AI0,34-8	0.34 (#22)	Phoenix Contact (The figure in parentheses is the applicable wire size.) CRIMPFOX 6 (0.25 to 6 mm <sup>2</sup> , AWG24 to 10)	
		AI0,5-8	0.5 (#20)		
		AI0,5-10			
		AI0,75-8	0.75 (#18)		
		AI0,75-10			
		AI1,0-8	1.0 (#18)		
		AI1,0-10			
		AI1,5-8	1.5 (#16)		
		AI1,5-10			
		AI2,5-10	2.0 *		
Ground terminals	Weidmuller	H0.14/12	0.14 (#26)	Weidmuller (The figure in parentheses is the applicable wire size.) PZ6 Roto (0.14 to 6 mm <sup>2</sup> , AWG 26 to 10)	
Terminals other than ground terminals		H0.25/12	0.25 (#24)		
		H0.34/12	0.34 (#22)		
		H0.5/14	0.5 (#20)		
		H0.5/16			
		H0.75/14	0.75 (#18)		
		H0.75/16			
		H1.0/14	1.0 (#18)		
		H1.0/16			
		H1.5/14	1.5 (#16)		
		H1.5/16			

\* Some AWG 14 wires exceed 2.0 mm<sup>2</sup> and cannot be used in the screwless clamping terminal block.

When you use any ferrules other than those in the above table, crimp them to the twisted wires so that the following processed dimensions are achieved.

Finished Dimensions of Ferrules



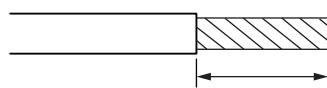
### Using Twisted Wires/Solid Wires

If you use the twisted wires or the solid wires, use the following table to determine the correct wire specifications.

Terminals		Wire type				Wire size	Conductor length (stripping length)
		Twisted wires		Solid wire			
Classification	Current capacity	Plated	Unplated	Plated	Unplated	0.08 to 1.5 mm <sup>2</sup> AWG28 to 16	8 to 10 mm
All terminals except ground terminals	2 A or less	Possible	Possible	Possible	Possible		
	Greater than 2 A and 4 A or less		Not Possible	Possible *1	Not Possible		
	Greater than 4 A	Possible *1	Not Possible	Not Possible	Not Possible		
Ground terminals	---	Possible	Possible	Possible *2	Possible *2	2.0 mm <sup>2</sup>	9 to 10 mm

\*1. Secure wires to the screwless clamping terminal block. Refer to the Securing Wires in the USER'S MANUAL for how to secure wires.

\*2. With the NX-TB□□□1 Terminal Block, use twisted wires to connect the ground terminal. Do not use a solid wire.

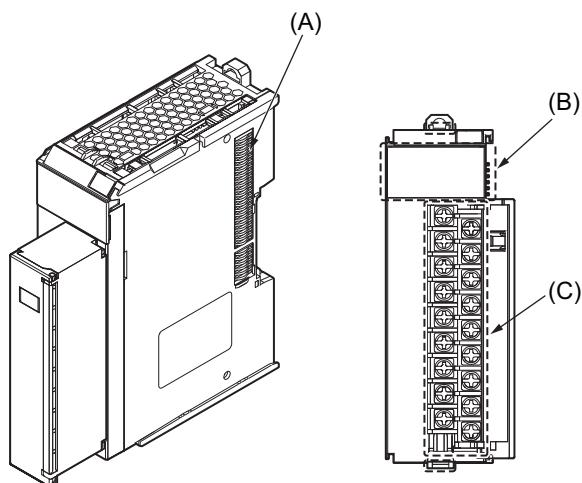


Conductor length (stripping length)

<Additional Information> If more than 2 A will flow on the wires, use plated wires or use ferrules.

**M3 Screw Terminal Block Type**

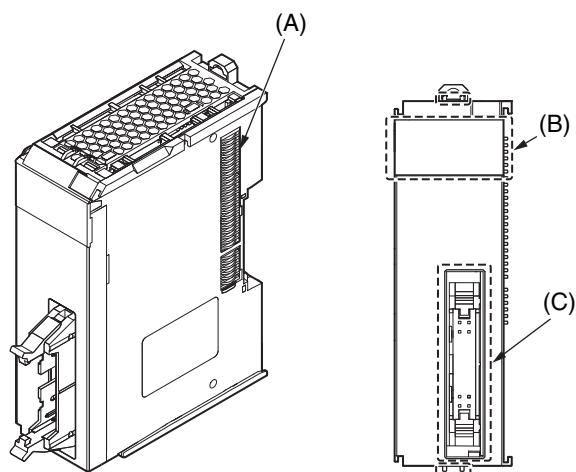
30 mm Width



Letter	Item	Specification
(A)	NX bus connector	This connector is used to connect to another Unit.
(B)	Indicators	The indicators show the current operating status of the Unit.
(C)	Screw terminals	These screw terminals are used to connect the wires.

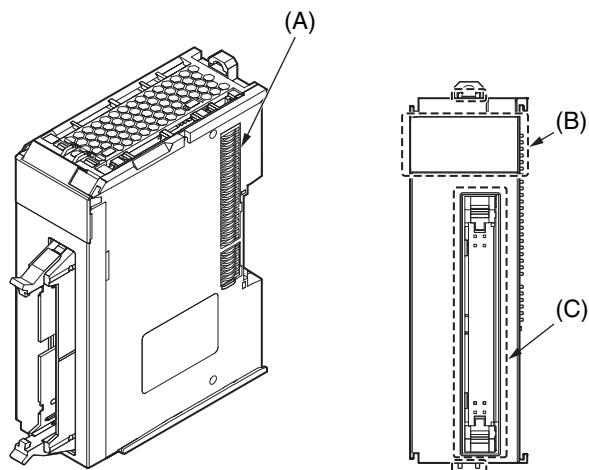
**MIL Connector Type (1 Connector with 20 terminals)**

30 mm Width



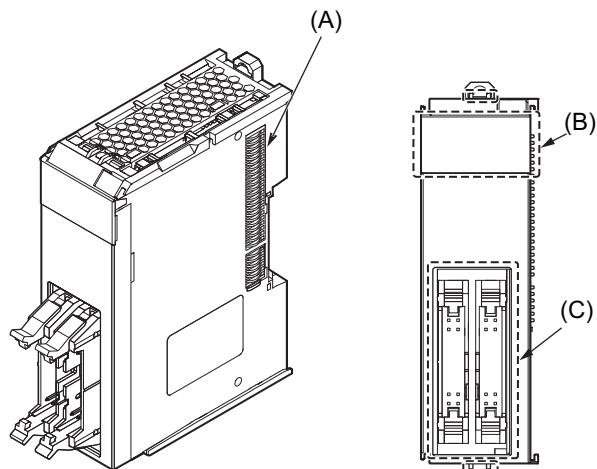
**MIL Connector Type (1 Connector with 40 terminals)**

30 mm Width



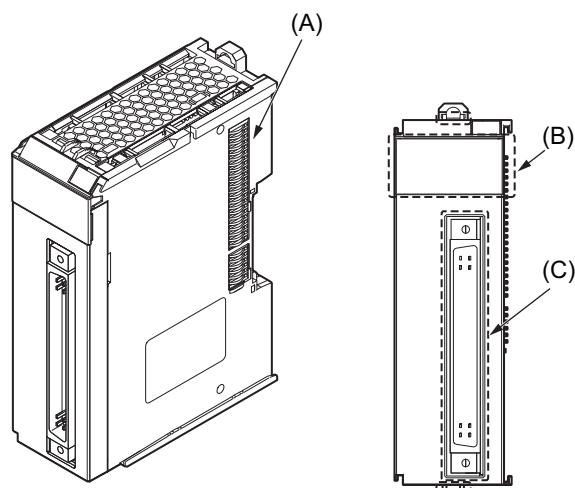
**MIL Connector Type (2 Connectors with 20 terminals)**

30 mm Width

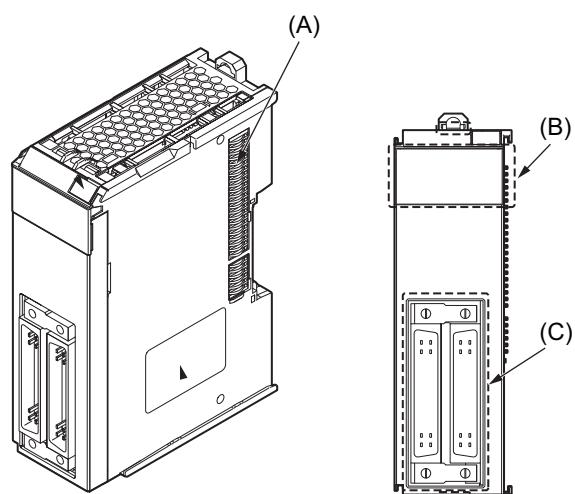


Letter	Item	Specification
(A)	NX bus connector	This connector is used to connect to another Unit.
(B)	Indicators	The indicators show the current operating status of the Unit.
(C)	Connectors	The connectors are used to connect to external devices.

**Fujitsu/OTAX Connector Type (1 Connector with 40 terminals)**  
**30 mm Width**



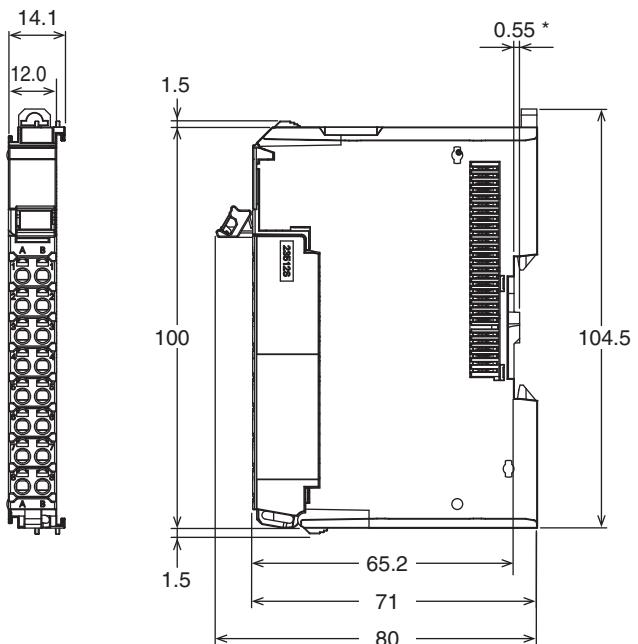
**Fujitsu/OTAX Connector Type (2 Connectors with 24 terminals)**  
**30 mm Width**



Letter	Item	Specification
(A)	NX bus connector	This connector is used to connect to another Unit.
(B)	Indicators	The indicators show the current operating status of the Unit.
(C)	Connectors	The connectors are used to connect to external devices.

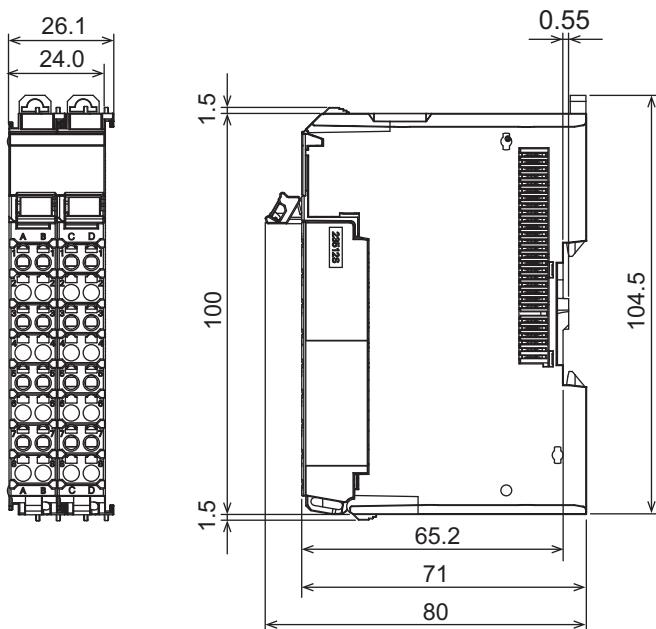
## **Screwless Clamping Terminal Block Type**

**12 mm Width**



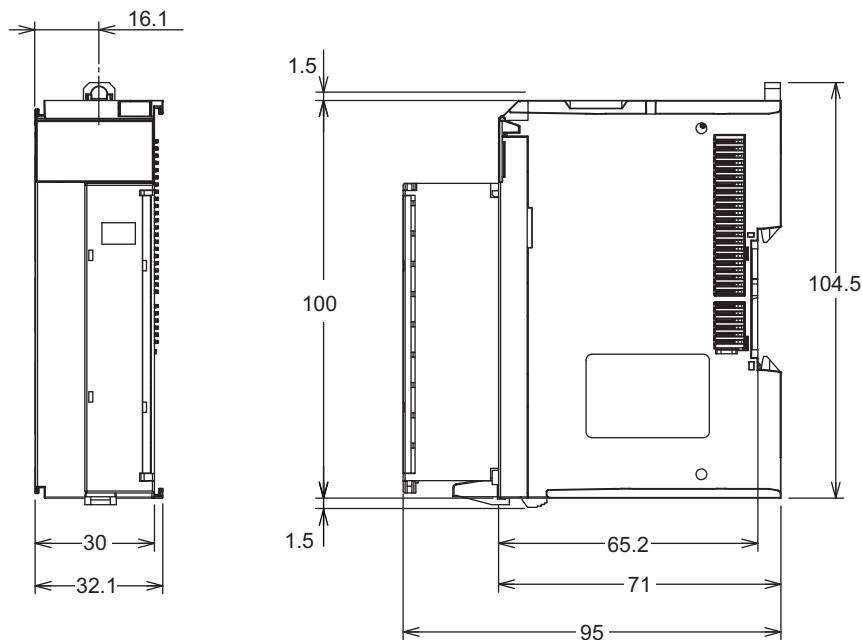
\* The dimension is 1.35 mm for Units with lot numbers through December 2014.

**24 mm Width**

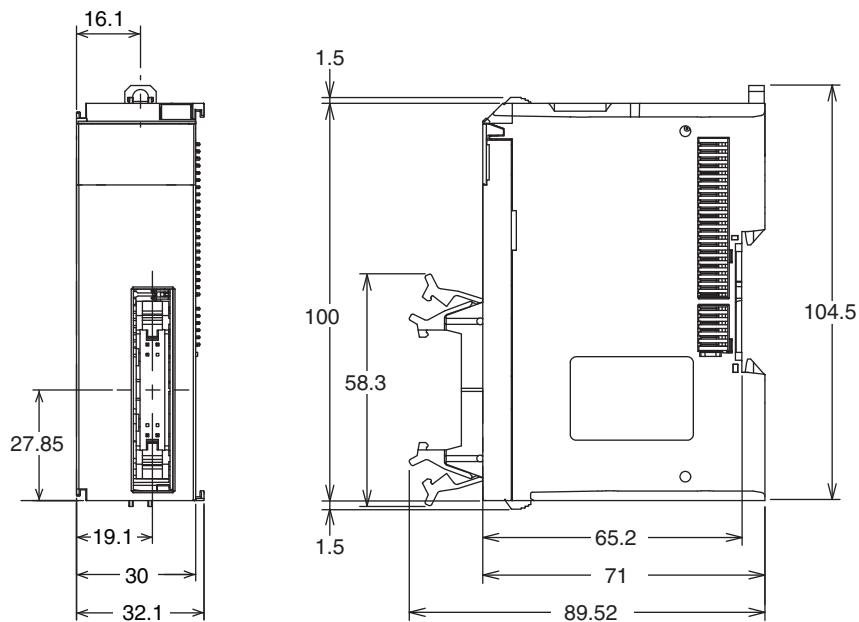


**M3 Screw Terminal Block Type**

30 mm Width

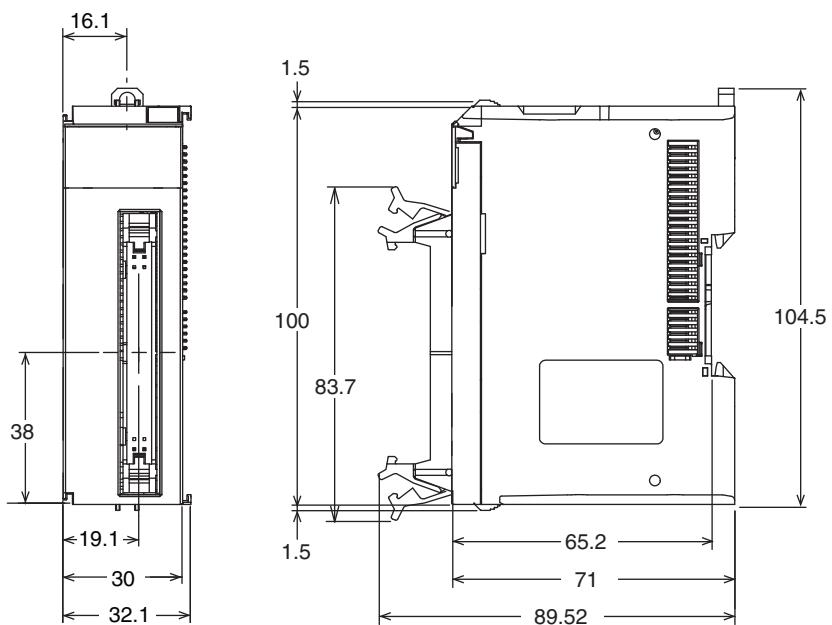
**MIL Connector Type (1 Connector with 20 terminals)**

30 mm Width



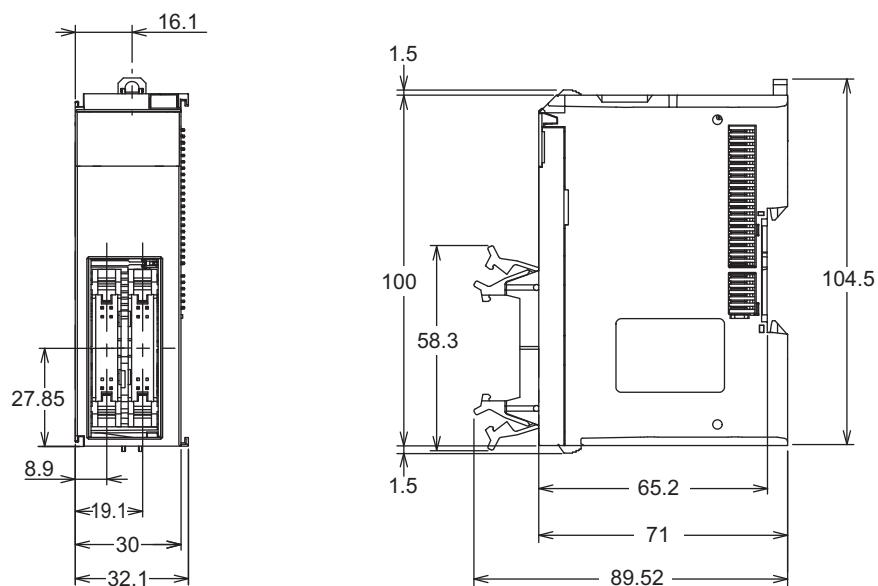
**MIL Connector Type (1 Connector with 40 terminals)**

**30 mm Width**

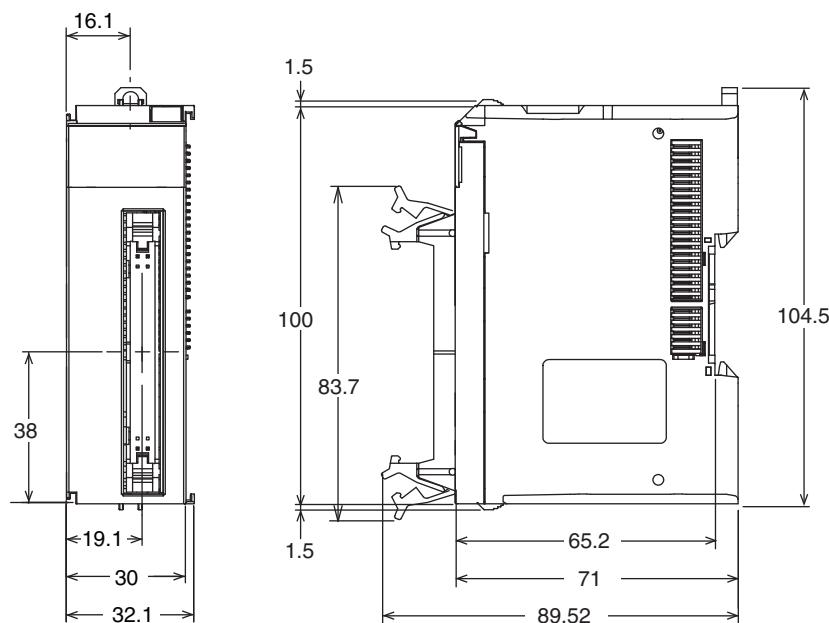


**MIL Connector Type (2 Connectors with 20 terminals)**

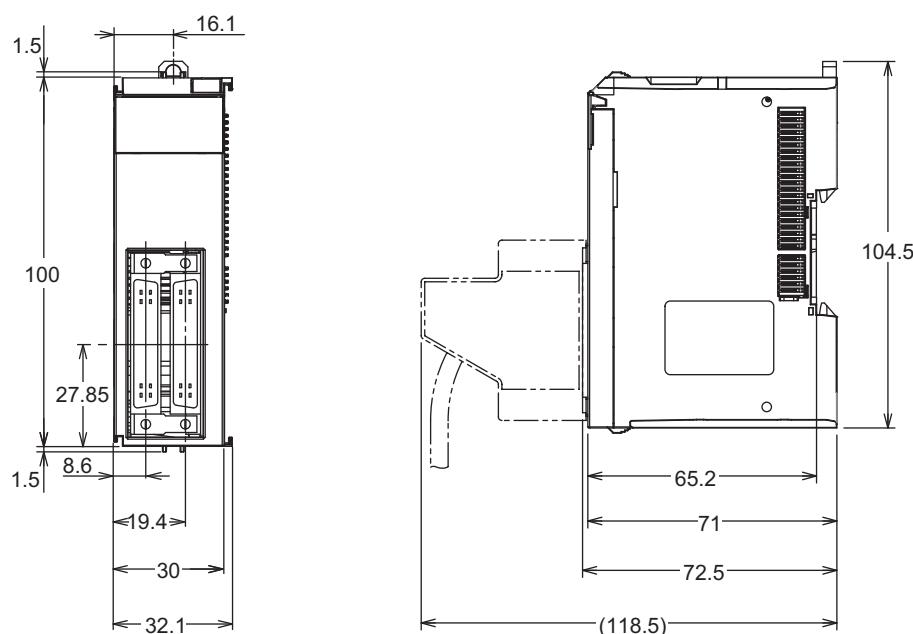
**30 mm Width**



**Fujitsu/OTAX Connector Type (1 Connector with 40 terminals)**  
**30 mm Width**



**Fujitsu/OTAX Connector Type (2 Connectors with 24 terminals)**  
**30 mm Width**



**Related Manual**

Cat. No.	Model number	Manual name	Application	Description
W521	NX-ID□□□□ NX-IA□□□□ NX-OD□□□□ NX-OC□□□□ NX-MD□□□□	NX-series Digital I/O Units User's Manual	Learning how to use NX-series Digital I/O Units	The hardware, setup methods, and functions of the NX-series Digital I/O Units are described.

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