NX-ID/IA/OD/OC/MD

CSM NX-ID IA OD OC MD DS F 6 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 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

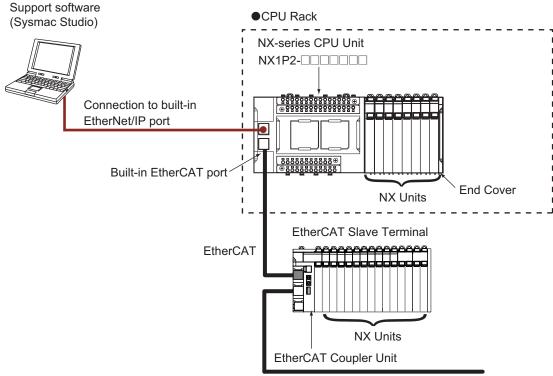
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System Configurations

Connected to a CPU Unit

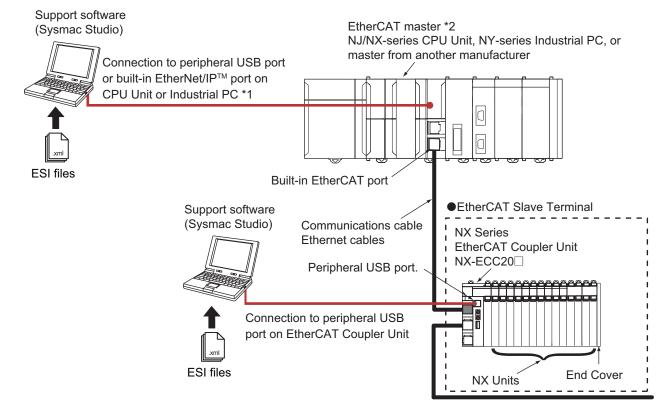
The following figure shows a system configuration when NX Units are connected to an NX-series CPU Unit.



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.



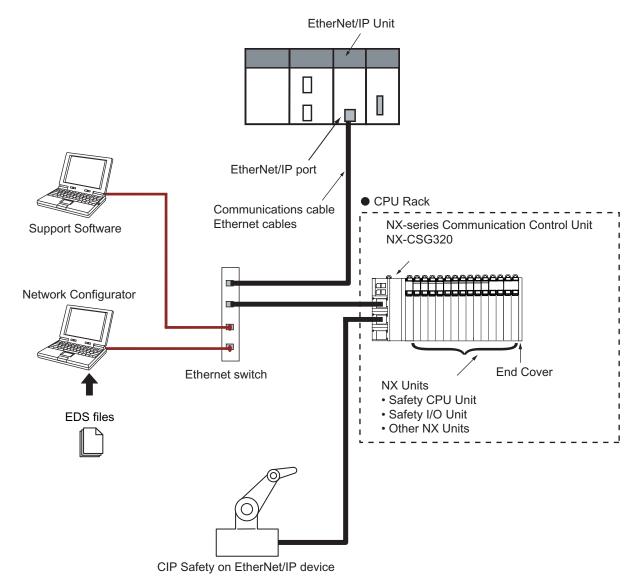
- *1. The connection method for the Sysmac Studio depends on the model of the CPU Unit or Industrial PC.
- *2. An EtherCAT Slave Terminal cannot be connected to any of the OMRON CJ1W-NC□81/□82 Position Control Units even though they can operate as EtherCAT masters.

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

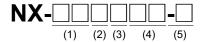
The following figure shows a system configuration when a group of NX Units is connected to an NX-series Communication Control Unit. To configure a Safety Network Controller, mount the Safety CPU Unit, which is one of the NX Units, to the CPU Rack of the Communication Control Unit

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



(1) Unit type

No.	Specification					
ID	DC input					
IA	AC input					
OD	Transistor output					
ОС	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 connector							

(4) Other specifications Digital Input Units

		ON/OFF res	ponse time	I/O refreshing method		
No.	Input voltage	Input voltage Sycoods 1 44 44 may		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		Yes		Yes		
43	24 VDC		Yes	Yes		
44			Yes		Yes	

Digital Output Units

			ON/OFF response time		I/O refreshing	method	Other functions														
No. Rated voltage		Load current	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	Load short-circuit protection														
21	12 to 24 VDC	0.5 A	Yes		Yes																
33	or 240 VAC	2 A	Yes		Yes																
53																		Yes	Yes		
54				Yes		Yes															
56	04.1/00	0.5 A	Yes		Yes		Yes														
57	24 VDC			Yes	Yes		Yes														
58				Yes		Yes	Yes														
68		2 A	Yes		Yes		Yes														

Digital Mixed I/O Units

2 · g · ta										
	Input section	Output section								
No.	Rated input voltage		Load	ON/OFF res	ponse time		Other functions			
110.		Rated voltage	current	Exceeds 1 μs	1 μs max.	I/O refreshing method	Load short-circuit protection			
21	21 56 24 VDC	12 to24 VDC	0.5 A	Yes		Switching Synchronous	Yes			
		24 VDC	0.5 A	Yes		I/O refreshing and Free-Run refreshing				

^{*1} Free-Run refreshing*2 Synchronous I/O refreshing

^{*1} Free-Run refreshing
*2 Synchronous I/O refreshing

Ordering Information

Applicable standards

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

Digital Input Units

	Specifications						
Product Name	Number of points Internal I/O common Rated input voltage		Rated input voltage	I/O refreshing method ON/OFF response time		Model	
			12 to 24 VDC	Switching Synchronous I/O re-	20 μs max./400 μs max.	NX-ID3317	
		NPN		freshing and Free-Run refreshing		NX-ID3343	
DC Input Unit		NIN	24 VDC	Input refreshing with input changed time only *1	100 ns max./100 ns max.	NX-ID3344	
	4 points		12 to 24 VDC	Switching Synchronous I/O re-	20 μs max./400 μs max.	NX-ID3417	
		PNP		freshing and Free-Run refreshing		NX-ID3443	
		1141		Input refreshing with input changed time only *1	100 ns max./100 ns max.	NX-ID3444	
Screwless Clamping	0 ! 4	NPN	24 VDC			NX-ID4342	
Terminal Block, 12 mm Width)	8 points	PNP		Switching Synchronous I/O re-	00	NX-ID4442	
widilij	40	NPN		freshing and Free-Run refreshing	20 μs max./400 μs max.	NX-ID5342	
	16 points	PNP				NX-ID5442	
DC Input Unit (M3 Screw Terminal Block, 30 mm Width)	16 points	For both NPN/PNP	24 VDC	Switching Synchronous I/O re- freshing and Free-Run refreshing	20 μs max./400 μs max.	NX-ID5142-1	
DC Input Unit	16 points		24 VDC	Switching Synchronous I/O re- freshing and Free-Run refreshing	20 μs max./400 μs max.	NX-ID5142-5	
(MIL Connector, 30 mm Width)	32 points	NPN/PNP		Testing and Free-ran relicating		NX-ID6142-5	
DC Input Unit (Fujitsu Connector, 30 mm Width)	32 points	For both NPN/PNP	24 VDC	Switching Synchronous I/O re- freshing and Free-Run refreshing	20 μs max./400 μs max.	NX-ID6142-6	
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

	Specifications								
Product Name	Number of points	Internal I/O common	Maximum value of load current	Rated voltage	I/O refreshing method	ON/OFF response time	Model		
	2	NPN	0.5 A/point, 1 A/Unit	24 VDC	Output refreshing with speci-	300 ns max./	NX-OD2154		
	2	PNP	0.5 Arpoint, 1 Aronic	24 VDC	fied time stamp only *1	300 ns max.	NX-OD2258		
		NPN		12 to 24 VDC		0.1 ms max./ 0.8 ms max.	NX-OD3121		
ransistor Output Unit			0.5 A/point, 2 A/Unit			300 ns max./ 300 ns max.	NX-OD3153		
	4		0.07 (point, 27 (onit	24 VDC		0.5 ms max./ 1.0 ms max.	NX-OD3256		
		PNP		24 VDO		300 ns max./ 300 ns max.	NX-OD3257		
			2 A/point, 8 A/Unit		Switching Synchronous I/O re- freshing and Free- Run refresh- ing	0.5 ms max./ 1.0 ms max.	NX-OD3268		
Screwless Clamping Ferminal Block, 12 mm Vidth)	0	NPN		12 to 24 VDC	9	0.1 ms max./ 0.8 ms max.	NX-OD4121		
viden,	8	PNP	O.F. A./noint A. A./l.Init	24 VDC		0.5 ms max./ 1.0 ms max.	NX-OD4256		
	16	NPN	0.5 A/point, 4 A/Unit	12 to 24 VDC		0.1 ms max./ 0.8 ms max.	NX-OD5121		
	16	PNP		24 VDC		0.5 ms max./ 1.0 ms max.	NX-OD5256		
Transistor Output Unit (M3 Screw Terminal Block, 30 mm Width)	16	NPN	0.5 A/point, 5 A/Unit	12 to 24 VDC	Switching Synchronous I/O re- freshing and Free- Run refresh-	0.1 ms max./ 0.8 ms max.	NX-OD5121-		
		PNP	o.o Apoliti, o Alollic	24 VDC	ing	0.5 ms max./ 1.0 ms max.	NX-OD5256-		
ransistor Output Unit	40	NPN	12 to 24 VDC		0.1 ms max./ 0.8 ms max.	NX-OD5121-			
	16	PNP	0.5 A/point, 2 A/Unit	24 VDC		0.5 ms max./ 1.0 ms max.	NX-OD5256-		
		NPN	0.5 A/point, 2 A/	12 to 24 VDC	Switching Synchronous I/O re- freshing and Free- Run refresh- ing	0.1 ms max./ 0.8 ms max.	NX-OD6121-		
MIL Connector, 30 mm Vidth)	32	PNP	common, 4 A/Unit	24 VDC		0.5 ms max./ 1.0 ms max.	NX-OD6256-		
Fujitsu Connector, 30 nm Width)	32	NPN	0.5 A/point, 2 A/ common, 4 A/Unit	12 to 24 VDC	Switching Synchronous I/O re- freshing and Free- Run refresh- ing	0.1 ms max./ 0.8 ms max.	NX-OD6121-0		
telay Output Unit	_	Relay type: N.O.	250 VAC/2 A (coso=1), 250 VAC/	5 5 6 11	15 ms max./	NX-OC2633		
	2	Relay type: N.O.+N.C.	2 A (cosφ=0.4), 24 VE		Free-Run refreshing	15 ms max.	NX-OC2733		
Screwless Clamping ferminal Block, 12 mm Vidth/24 mm Width)	8	Relay type: N.O.	250 VAC/2 A (cosφ=1), 250 VAC/ 2 A (cosφ=0.4), 24 VDC/2 A, 8 A/Unit		Free-Run refreshing	15 ms max./ 15 ms max.	NX-OC4633		

^{*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

	Specifications							
Product Name	Number of points	Internal I/O Maximum value of I common current		I/O refreshing method	ON/OFF response time	Model		
DC Input/Transistor Output Unit	Outputs: 16 points	Outputs: NPN Inputs: For both NPN/PNP	Outputs: 12 to 24 VDC Inputs: 24 VDC	Switching Synchronous I/	Outputs: 0.1 ms max./ 0.8 ms max. Inputs: 20 μs max./ 400 μs max.	NX-MD6121-5		
(MIL Connector, 30 mm Width)	Inputs: 16 points	Outputs: PNP Inputs: For both NPN/PNP	Outputs: 24 VDC Inputs: 24 VDC	O refreshing and Free- Run refreshing	Outputs: 0.5 ms max./ 1.0 ms max. Inputs: 20 μs max./ 400 μs max.	NX-MD6256-5		
DC Input/Transistor Output Unit (Fujitsu 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 μs max./ 400 μs max.	NX-MD6121-6		

Optional Products

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

Accessories

Not included.

Connection Patterns for Connector-Terminal Block Conversion Units

Pattern	Configuration	Number of connectors	Branching
А	Connecting Cable Connector-Terminal Block Conversion Unit 20 or 40 terminals	1	None
В	Connecting Cable Connector-Terminal Block Conversion Unit 20 terminals 20 terminals	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
					XW2Z-□□□X	XW2K-20G-T	Push-In Plus	No
		1 MIL	NPN/		XW2Z-□□□X-R	XW2K-20G-O16A-IN	Push-In Plus	Yes
NX-ID5142-5	16 inputs	connector	PNP	Α	XW2Z-□□□X	XW2D-20G6	Phillips screw	No
					XW2Z-□□X	XW2R-E20GD-T	Slotted screw (rise up)	No
				Α	XW2Z-□□□K	XW2K-40G-O32C	Push-In Plus	No
				Α	XW2Z-□□□K	XW2K-40G-O32C-IN	Push-In Plus	Yes
NX-ID6142-5	32 inputs	1 MIL	NPN/	Α	XW2Z-□□□K	XW2R-J34GD-C2	Phillips screw	No
147 150142 0	oz inputo	connector	PNP	Α	XW2Z-□□□K	XW2D-40G6	Phillips screw	No
				A	XW2Z-□□□K	XW2R-E34GD-C2	Slotted screw (rise up)	No
		ts 1 Fujitsu connector		Α	XW2Z-□□□B	XW2K-40G-O32A	Push-In Plus	No
			NPN/	Α	XW2Z-□□□B	XW2K-40G-O32A-IN	Push-In Plus	Yes
NX-ID6142-6	32 inputs			Α	XW2Z-□□□B	XW2R-J34GD-C1	Phillips screw	No
	02puto		PNP	Α	XW2Z-□□□B	XW2D-40G6	Phillips screw	No
				Α	XW2Z-□□B	XW2R-E34GD-C1	Slotted screw (rise up)	No
				Α	XW2Z-□□□X	XW2K-20G-T	Push-In Plus	No
		1 MIL		Α	XW2Z-□□□X-R	XW2K-20G-O16B-OUT	Push-In Plus	Yes
NX-OD5121-5	16 outputs	connector	NPN	Α	XW2Z-□□□X	XW2D-20G6	Phillips screw	No
				А	XW2Z-□□X	XW2R-E20GD-T	Slotted screw (rise up)	No
				Α	XW2Z-□□□X	XW2K-20G-T	Push-In Plus	No
		1 MII		Α	XW2Z-□□□X-R	XW2K-20G-O16B-OUT	Push-In Plus	Yes
NX-OD5256-5	16 outputs	1 MIL connector	PNP	Α	XW2Z-□□□X	XW2D-20G6	Phillips screw	No
				А	XW2Z-□□X	XW2R-E20GD-T	Slotted screw (rise up)	No

NX-ID/IA/OD/OC/MD

Unit	I/O capacity	Number of connectors	Polarity	Connection pattern	Connecting Cable *	Connector-Terminal Block Conversion Unit	Wiring method	Common terminal
				Α	XW2Z-□□□K	XW2K-40G-O32C	Push-In Plus	No
				Α	XW2Z-□□□K	XW2K-40G-O32C-OUT	Push-In Plus	Yes
NX-OD6121-5	32 outputs	1 MIL	NPN	Α	XW2Z-□□□K	XW2R-J34GD-C4	Phillips screw	No
107 000121 0	oz odipaio	connector	141 14	Α	XW2Z-□□□K	XW2D-40G6	Phillips screw	No
				А	XW2Z-□□□K	XW2R-E34GD-C4	Slotted screw (rise up)	No
				Α	XW2Z-□□□B	XW2K-40G-O32B	Push-In Plus	No
				Α	XW2Z-□□□B	XW2K-40G-O32B-OUT	Push-In Plus	Yes
NX-OD6121-6	32 outputs	1 Fujitsu	NPN	Α	XW2Z-□□□B	XW2R-J34GD-C3	Phillips screw	No
14% 050121 0	oz outputo	connector	111	Α	XW2Z-□□□B	XW2D-40G6	Phillips screw	No
				А	XW2Z-□□B	XW2R-E34GD-C3	Slotted screw (rise up)	No
				Α	XW2Z-□□□K	XW2K-40G-O32C	Push-In Plus	No
				Α	XW2Z-□□□K	XW2K-40G-O32C-OUT	Push-In Plus	Yes
NX-OD6256-5	32 outputs	1 MIL	PNP	Α	XW2Z-□□□K	XW2R-J34GD-C4	Phillips screw	No
14X-OD0230-3	32 outputs	connector	I INI	Α	XW2Z-□□□K	XW2D-40G6	Phillips screw	No
				А	XW2Z-□□□K	XW2R-E34GD-C4	Slotted screw (rise up)	No
				В	XW2Z-□□□X	XW2K-20G-T	Push-In Plus	No
		s 1 MIL connector	NPN/ PNP	В	XW2Z-□□□X-R	XW2K-20G-O16A-IN	Push-In Plus	Yes
	16 inputs			В	XW2Z-□□□X	XW2D-20G6	Phillips screw	No
NV MDC404 F				В	XW2Z-□□□X	XW2R-E20GD-T	Slotted screw (rise up)	No
NX-MD6121-5	16 outputs	1 MIL connector	NPN	В	XW2Z-□□□X	XW2K-20G-T	Push-In Plus	No
				В	XW2Z-□□□X-R	XW2K-20G-O16B-OUT	Push-In Plus	Yes
				В	XW2Z-□□□X	XW2D-20G6	Phillips screw	No
				В	XW2Z-□□X	XW2R-E20GD-T	Slotted screw (rise up)	No
				В	XW2Z-□□□A	XW2K-20G-T	Push-In Plus	No
		1 Fuiitou	NPN/	В	XW2Z-□□□A	XW2K-20G-O16A-IN	Push-In Plus	Yes
	16 inputs	1 Fujitsu connector	PNP	В	XW2Z-□□□A	XW2D-20G6	Phillips screw	No
NX-MD6121-6				В	XW2Z-□□□A	XW2R-E20GD-T	Slotted screw (rise up)	No
NX-IVIDO 12 1-0				В	XW2Z-□□□A	XW2K-20G-T	Push-In Plus	No
		1 Fujitsu		В	XW2Z-□□□A	XW2K-20G-O16B-OUT	Push-In Plus	Yes
	16 outputs	connector	NPN	В	XW2Z-□□□A	XW2D-20G6	Phillips screw	No
				В	XW2Z-□□□A	XW2R-E20GD-T	Slotted screw (rise up)	No
				В	XW2Z-□□□X	XW2K-20G-T	Push-In Plus	No
		1 1 1	NIDNI/	В	XW2Z-□□□X-R	XW2K-20G-O16A-IN	Push-In Plus	Yes
	16 inputs	1 MIL connector	NPN/ PNP	В	XW2Z-□□□X	XW2D-20G6	Phillips screw	No
NIV MBOOTS T		35100.01		В	XW2Z-□□X	XW2R-E20GD-T	Slotted screw (rise up)	No
NX-MD6256-5				В	XW2Z-□□□X	XW2K-20G-T	Push-In Plus	No
		1 MIL		В	XW2Z-□□□X-R	XW2K-20G-O16B-OUT	Push-In Plus	Yes
	16 outputs	connector	NPN	В	XW2Z-□□□X	XW2D-20G6	Phillips screw	No
				В	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 Series Catalog (Cat. No. G077) and XW2D Series Datasheet for details.

^{*} $\square\square\square$ 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
Α	Connecting Cable I/O Relay Terminal	1	2 branches
E	I/O Relay Terminal Connecting Cable	2	None
F	Connecting Cable I/O Relay Terminal	1	

Connections to I/O Relay Terminals

Unit	I/O capacity	Number of connectors	Polarity	Connectio n pattern	Number of branches	Connecting Cable *1	I/O Relay Terminal	Wiring method
			F	None	XW2Z-RO□C	G7TC-ID16	Phillips screw	
			NPN	F	None	XW2Z-RO□C	G7TC-IA16	Phillips screw
NIV IDE440 E	10:	1 MIL	NPN	F	None	XW2Z-RO□C	G70V-SID16P	Push-in spring
NX-ID5142-5	16 inputs	connector		F	None	XW2Z-RO□C	G70V-SID16P-C16	Push-in spring
			PNP	F	None	XW2Z-RO□C	G70V-SID16P-1	Push-in spring
			PNP	F	None	XW2Z-RO□C	G70V-SID16P-1-C16	Push-in spring
				Α	2	XW2Z-RO□-□-D1	G7TC-ID16	Phillips screw
			NPN	Α	2	XW2Z-RO□-□-D1	G7TC-IA16	Phillips screw
NX-ID6142-5	20 immusta	1 MIL	INPIN	Α	2	XW2Z-RO□-□-D1	G70V-SID16P	Push-in spring
NX-ID6142-5	32 inputs	connector		Α	2	XW2Z-RO□-□-D1	G70V-SID16P-C16	Push-in spring
			PNP	Α	2	XW2Z-RO□-□-D1	G70V-SID16P-1	Push-in spring
			PNP	Α	2	XW2Z-RO□-□-D1	G70V-SID16P-1-C16	Push-in spring
		s 1 Fujitsu connector		Α	2	XW2Z-RI□C-□	G7TC-ID16	Phillips screw
			NPN	Α	2	XW2Z-RI□C-□	G7TC-IA16	Phillips screw
NX-ID6142-6	32 inputs		INFIN	Α	2	XW2Z-RI□C-□	G70V-SID16P	Push-in spring
NA-1D6142-6	32 inputs			Α	2	XW2Z-RI□C-□	G70V-SID16P-C16	Push-in spring
			PNP	Α	2	XW2Z-RI□C-□	G70V-SID16P-1	Push-in spring
			FINE	Α	2	XW2Z-RI□C-□	G70V-SID16P-1-C16	Push-in spring
				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
NX-OD5121-5	16 outputs	1 MIL connector	NPN	F	None	XW2Z-RO□C	G70D-VSOC16	Phillips screw
		2311100101		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
				F	None	XW2Z-RO□C	G70V-SOC16P-C4	Push-in spring

NX-ID/IA/OD/OC/MD

Unit	I/O capacity	Number of connectors	Polarity	Connectio n pattern	Number of branches	Connecting Cable *1	I/O Relay Terminal	Wiring method		
				F	None	XW2Z-RI□C	G7TC-OC16-1	Phillips screw		
				F	None	XW2Z-RO□C	G70D-SOC16-1	Phillips screw		
NY ODESES E	16 autouta	1 MIL	DND	F	None	XW2Z-RO□C	G70D-FOM16-1 *2	Phillips screw		
NX-OD5256-5	16 outputs	connector	PNP	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		
				Α	2	XW2Z-RO□-□-D1	G7TC-OC16	Phillips screw		
				Α	2	XW2Z-RO□-□-D1	G7TC-OC08	Phillips screw		
				Α	2	XW2Z-RO□-□-D1	G70D-SOC16	Phillips screw		
				Α	2	XW2Z-RO□-□-D1	G70D-FOM16	Phillips screw		
				Α	2	XW2Z-RO□-□-D1	G70D-VSOC16	Phillips screw		
NX-OD6121-5	32 outputs	1 MIL connector	NPN	Α	2	XW2Z-RO□-□-D1	G70D-VFOM16	Phillips screw		
		Connector		Α	2	XW2Z-RO□-□-D1	G70A-ZOC16-3 and Relay	Phillips screw		
				Α	2	XW2Z-RO□-□-D1	G70R-SOC08 *2	Phillips screw		
				Α	2	XW2Z-RO□-□-D1	G70D-SOC08	Phillips screw		
				Α	2	XW2Z-RO□-□-D1	G70V-SOC16P	Push-in spring		
				Α	2	XW2Z-RO□-□-D1	G70V-SOC16P-C4	Push-in spring		
				Α	2	XW2Z-RO□C-□	G7TC-OC16	Phillips screw		
						Α	2	XW2Z-RO□C-□	G7TC-OC08	Phillips screw
			NPN	Α	2	XW2Z-RO□C-□	G70D-SOC16	Phillips screw		
				Α	2	XW2Z-RO□C-□	G70D-FOM16	Phillips screw		
				Α	2	XW2Z-RO□C-□	G70D-VSOC16	Phillips screw		
NX-OD6121-6	32 outputs	1 Fujitsu		Α	2	XW2Z-RO□C-□	G70D-VFOM16	Phillips screw		
		connector		Α	2	XW2Z-RO□C-□	G70A-ZOC16-3 and Relay	Phillips screw		
				Α	2	XW2Z-RO□C-□	G70R-SOC08 *2	Phillips screw		
				Α	2	XW2Z-RO□C-□	G70D-SOC08	Phillips screw		
				Α	2	XW2Z-RO□C-□	G70V-SOC16P	Push-in spring		
				Α	2	XW2Z-RO□C-□	G70V-SOC16P-C4	Push-in spring		
				Α	2	XW2Z-RI□-□-D1	G7TC-OC16-1	Phillips screw		
		1 MIL		Α	2	XW2Z-RO□-□-D1	G70D-SOC16-1	Phillips screw		
NX-OD6256-5	32 outputs	connector	PNP	Α	2	XW2Z-RO□-□-D1	G70D-FOM16-1 *2	Phillips screw		
				Α	2	XW2Z-RO□-□-D1	G70A-ZOC16-4 and Relay	Phillips screw		
				Е	None	XW2Z-RO□C	G7TC-ID16	Phillips screw		
		1 MIL		Е	None	XW2Z-RO□C	G7TC-IA16	Phillips screw		
	16 inputs	connector	NPN	Е	None	XW2Z-RO□C	G70V-SID16P	Push-in spring		
				E	None	XW2Z-RO□C	G70V-SID16P-C16	Push-in spring		
				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		
NX-MD6121-5				E	None	XW2Z-RO□C	G70D-FOM16	Phillips screw		
· •				E	None	XW2Z-RO□C	G70D-VSOC16	Phillips screw		
	16 outputs	1 MIL	NPN	E	None	XW2Z-RO□C	G70D-VFOM16	Phillips screw		
		connector		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		XW2Z-RO□C	G70V-SOC16P-C4			
		1		None	7442Z-110LLC	07 0V-300 10F-04	Push-in spring			

NX-ID/IA/OD/OC/MD

Unit	I/O capacity	Number of connectors	Polarity	Connectio n pattern	Number of branches	Connecting Cable *1	I/O Relay Terminal	Wiring method
				E	None	XW2Z-R□C	G7TC-ID16	Phillips screw
	40: 1	1 Fujitsu	NIDNI	Е	None	XW2Z-R□C	G7TC-IA16	Phillips screw
	16 inputs	connector	NPN	Е	None	XW2Z-R□C	G70V-SID16P	Push-in spring
				Е	None	XW2Z-R□C	G70V-SID16P-C16	Push-in spring
				E	None	XW2Z-R□C	G7TC-OC16	Phillips screw
				Е	None	XW2Z-R□C	G7TC-OC08	Phillips screw
				E	None	XW2Z-R□C	G70D-SOC16	Phillips screw
NX-MD6121-6				Е	None	XW2Z-R□C	G70D-FOM16	Phillips screw
		1 Fujitsu connector	NPN	Е	None	XW2Z-R□C	G70D-VSOC16	Phillips screw
	16 outputs			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
				Е	None	XW2Z-R□C	G70D-SOC08	Phillips screw
				E	None	XW2Z-R□C	G70V-SOC16P	Push-in spring
				Е	None	XW2Z-R□C	G70V-SOC16P-C4	Push-in spring
	16 inputs	1 MIL	PNP	E	None	XW2Z-RO□C	G70V-SID16P-1	Push-in spring
	To inputs	connector	PINP	E	None	XW2Z-RO□C	G70V-SID16P-1-C16	Push-in spring
				Е	None	XW2Z-RO□C	G7TC-OC16-1	Phillips screw
NX-MD6256-5				Е	None	XW2Z-RI□C	G70D-SOC16-1	Phillips screw
C-0C200INI-VAI	16 outputs	1 MIL	PNP	E	None	XW2Z-RI□C	G70D-FOM16-1 *2	Phillips screw
	16 outputs	connector	FINE	Е	None	XW2Z-RI□C	G70A-ZOC16-4 and Relay	Phillips screw
				Е	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		
Enclosure		Mounted in a panel		
Grounding n	nethod	Ground to 100 Ω or less		
	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.		
Operating environment	Noise immunity	2 kV on power supply line (Conforms to IEC61000-4-4.)		
environment	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/s², 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/s², 3 times each in X, Y, and Z directions		
Applicable standards *2		cULus: Listed (UL508) or Listed (UL 61010-2-201), ANSI/ISA 12.12.01, 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

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 I	·	
	TS indicator, input indicator	Internal I/O common	NPN
	ID3317	Rated input voltage	12 to 24 VDC (9 to 28.8 VDC)
	0 1	Input current	6 mA typical (at 24 VDC), rated current 9 VDC min./3 mA min. (between IOV and
Indicators	2 3	ON voltage/ON current	each signal)
maioatoro		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.
		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
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Photocoupler isolation
Insulation resistance	$20~\text{M}\Omega$ 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 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 or Communication Control Unit 0.90 W max. Connected to a Communications Coupler Unit 0.50 W max.	Current consumption from I/O power supply	No consumption
Weight	65 g max.		
Circuit layout		nt control reuit	I/O power supply + NX bus connector (right)
Installation orientation and restrictions	Installation orientation: Connected to a CPU Unit or Communications Couple Restrictions: No restrictions		
Terminal connection diagram	Additional I/O Power Supply Unit A1 B1 IOV IOV IOV IOV IOG IOG A8 B8	DC Input Unit NX-ID3317 Two- Ser IN0 IN1 IOV0 IOV1 IOG0 IOG1 IN2 IN3 IOV2 IOV3 IOG2 IOG3 A8 B8	Three-wire sensor
Disconnection/ Short-circuit detection	Not supported.	Protective function	Not supported.

11.11	Ino		LNV IDOO 40
Unit name	DC Input Unit	Model External connection	NX-ID3343 Screwless clamping terminal block (12
Number of points	4 points	terminals	terminals)
I/O refreshing method	Selectable Synchronous I/O refreshing or F		NDN
	TS indicator, input indicator ID3343	Internal I/O common	NPN 24 VDC (15 to 28.8 VDC)
	DTS	Rated input voltage Input current	, ,
	0 1 2 3	•	3.5 mA typical (at 24 VDC), rated current 15 VDC min./3 mA min. (between IOV and
Indicators		ON voltage/ON current	each signal)
		OFF voltage/OFF current	5 VDC max./1 mA max. (between IOV and each signal)
		ON/OFF response time	100 ns max./100 ns max.
		Input filter time	Without filter, 1 μs, 2 μs, 4 μs, 8 μs (factory setting), 16 μs, 32 μs, 64 μs, 128 μs, 256 μs
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Digital isolator isolation
Insulation resistance	20 M Ω 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 or Communication Control Unit 0.90 W max. Connected to a Communications Coupler Unit 0.55 W max.	Current consumption from I/O power supply	30 mA max.
Weight	65 g max.		
Circuit layout	Terminal block IN0 to IN3 IN0 to IN3 IN0 to IN3 IN0 to IN3 IN0 bus connector (left) I/O power supply +	rent control circuit timo io uoiteloo s	I/O power supply + NX bus connector (right)
Installation orientation and restrictions	Installation orientation: Connected to a CPU Unit or Communica Connected to a Communications Couple Restrictions: No restrictions		
Terminal connection diagram	Additional I/O Power Supply Unit A1 B1 OIOV IOV IOV IOV IOG IOG A8 B8	DC Input Unit NX-ID3343 Two- IN0 IN1 IOV0 IOV1 IOG0 IOG1 IN2 IN3 IOV2 IOV3 IOG2 IOG3 A6 B8	Three-wire sensor
Disconnection/ Short-circuit detection	Not supported.	Protective function	Not supported.

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		
	TS indicator, input indicators	Internal I/O common	NPN
	ID3344	Rated input voltage	24 VDC (15 to 28.8 VDC)
	DTS .	Input current	3.5 mA typical (at 24 VDC), rated current
Indicators	0 1 2 3	ON voltage/ON current	15 VDC min./3 mA min. (between IOV and each signal)
		OFF voltage/OFF current	5 VDC max./1 mA max. (between IOV and each signal)
		ON/OFF response time	100 ns max./100 ns max.
<u> </u>	10 (10) 100 (11) 71 (15)	Input filter time	No filter *
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Digital isolator isolation
Insulation resistance	20 M Ω 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	Terminal block IN0 to IN3 IN0 to IN3 IN5 bus connector (left) I/O power supply + I/O power supply - Installation orientation:	Power supply irrent control circuit irrent control circuit	I/O power supply + NX bus connector (right)
Installation orientation and restrictions	Connected to a CPU Unit: Possible in up Connected to a Communications Couple Restrictions: No restrictions		ions.
Terminal connection diagram	Additional I/O Power Supply Unit A1 B1 OIOV IOV IOV IOV IOG IOG A8 B8		-wire nsor Three-wire sensor
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.

Unit name	DC Input Unit	Model	NX-ID3417
Number of points	4 points	External connection terminals	Screwless clamping terminal block (12 terminals)
I/O refreshing method	Selectable Synchronous I/O refreshing or F TS indicator, input indicator	Internal I/O common	PNP
	ID3417	Rated input voltage	12 to 24 VDC (9 to 28.8 VDC)
	DTS	Input current	6 mA typical (at 24 VDC), rated current
	0 1 2 3	ON voltage/ON current	9 VDC min./3 mA min. (between IOG and each signal)
Indicators		OFF voltage/OFF current	2 VDC max./1 mA max. (between IOG and each signal)
		ON/OFF response time	20 μs max./400 μs max.
		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
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Photocoupler isolation
Insulation resistance	20 M Ω 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 or Communication Control Unit 0.90 W max. Connected to a Communications Coupler Unit 0.50 W max.	Current consumption from I/O power supply	No consumption
Weight	65 g max.		
Circuit layout	Terminal block IN0 to IN3 Current circ IOG0 to 3 NX bus connector (left) I/O power supply +		I/O power supply + NX bus connector (right)
Installation orientation and restrictions	Installation orientation: Connected to a CPU Unit or Communica Connected to a Communications Couple Restrictions: No restrictions		
Terminal connection diagram	Additional I/O Power Supply Unit A1 B1 OIOV IOV IOV IOV IOV IOG IOG A8 B8	DC Input Unit	Three-wire sensor
Disconnection/ Short-circuit detection	Not supported.	Protective function	Not supported.

Unit name	DC Input Unit	Model	NX-ID3443
Number of points	4 points	External connection terminals	Screwless clamping terminal block (12 terminals)
I/O refreshing method	Selectable Synchronous I/O refreshing or F	i -	
	TS indicator, input indicator	Internal I/O common	PNP
	ID3443 • TS	Rated input voltage	24 VDC (15 to 28.8 VDC)
	0 1	Input current	3.5 mA typical (at 24 VDC), rated current 15 VDC min./3 mA min. (between IOG and
Indicators	2 3	ON voltage/ON current	each signal)
		OFF voltage/OFF current	5 VDC max./1 mA max. (between IOG and each signal)
		ON/OFF response time	100 ns max./100 ns max.
		Input filter time	Without filter, 1 μs, 2 μs, 4 μs, 8 μs (factory setting),16 μs, 32 μs, 64 μs, 128 μs, 256 μs
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Digital isolator isolation
Insulation resistance	20 M Ω 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 or Communication Control Unit 0.90 W max. Connected to a Communications Coupler Unit 0.55 W max.	Current consumption from I/O power supply	30 mA max.
Weight	65 g max.		
Circuit layout	Terminal block IN0 to IN3 NX bus connector (left) I/O power supply + I/O power supply -	Current control circuit tinguio o o o o o o o o o o o o o o o o o o	I/O power supply + NX bus connector (right)
Installation orientation and restrictions	Installation orientation: Connected to a CPU Unit or Communica Connected to a Communications Couple Restrictions: No restrictions		
Terminal connection diagram	Additional I/O Power Supply Unit A1 IOS IOS IOS IOS IOS A8 B8	DC Input Unit NX-ID3443 Two- Ser IN0 IN1 IOV0 IOV1 IOG0 IOG1 IN2 IN3 IOV2 IOV3 IOG2 IOG3 A8 B8	Three-wire sensor
Disconnection/ Short-circuit detection	Not supported.	Protective function	Not supported.

Unit name	DC Input Unit	Model	NX-ID3444
		External connection	Screwless clamping terminal block (12
Number of points	4 points	terminals	terminals)
I/O refreshing method	Input refreshing with input changed time		I
	TS indicator, input indicators	Internal I/O common	PNP
	ID3444	Rated input voltage	24 VDC (15 to 28.8 VDC)
	●TS O 1	Input current	3.5 mA typical (at 24 VDC), rated current
Indicators	2 3	ON voltage/ON current	15 VDC min./3 mA min. (between IOG and each signal)
		OFF voltage/OFF current	5 VDC max./1 mA max. (between IOG and each signal)
		ON/OFF response time	100 ns max./100 ns max.
		Input filter time	No filter*
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Digital isolator isolation
Insulation resistance	20 M Ω 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	Terminal block IN0 to IN3 IOG0 to 3 NX bus connector (left) I/O power supply +	Power supply Current control circuit	I/O power supply + NX bus connector (right)
Installation orientation and restrictions	Installation orientation: Connected to a CPU Unit: Possible in up Connected to a Communications Couple Restrictions: No restrictions		ions.
Terminal connection diagram	Additional I/O Power Supply Unit A1 B1 OIOV IOV IOV IOV IOG IOG A8 B8	DC Input Unit NX-ID3444 Two- sen IN0 IN1 • IOV0 IOV1• IOG0 IOG1 IN2 IN3 • IOV2 IOV3 • IOG2 IOG3 • A8 B8	····
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.

Unit name	DC Input Unit	Model	NX-ID4342
Number of points	8 points	External connection	Screwless clamping terminal block (16
•	·	terminals	terminals)
I/O refreshing method	Selectable Synchronous I/O refreshing or F TS indicator, input indicator	Internal I/O common	NPN
	ID4342	Rated input voltage	24 VDC (15 to 28.8 VDC)
	DTS	Input current	3.5 mA typical (at 24 VDC), rated current
	0 1 2 3 4 5	ON voltage/ON current	15 VDC min./3 mA min. (between IOG and each signal)
Indicators	6 7	OFF voltage/OFF current	5 VDC max./1 mA max. (between IOG and each signal)
		ON/OFF response time	20 μs max./400 μs max.
		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
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Photocoupler isolation
Insulation resistance	$20~\text{M}\Omega$ 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 the NX bus	Current capacity of I/O power supply terminal	IOG: 0.1 A/terminal max.
NX Unit power consumption	Connected to a CPU Unit or Communication Control Unit 0.90 W max. Connected to a Communications Coupler Unit 0.50 W max.	Current consumption from I/O power supply	No consumption
Weight	65 g max.		
Circuit layout	Terminal block INO to IN7 NX bus connector (left) I/O power supply + l/O power supply -		
Installation orientation and restrictions	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		
Terminal connection diagram	Power Supply Unit A1 B1 A1 ICO ICO ICO IOV IOV IOV IOV IOV	10G0 10V 10G0 10V 10V 10G2 10V 10V 10G4 10G4	
Disconnection/ Short-circuit detection	Not supported.	Protective function	Not supported.

Unit name	DC Input Unit	Model	NX-ID4442
Number of points	8 points	External connection terminals	Screwless clamping terminal block (16 terminals)
I/O refreshing method	Selectable Synchronous I/O refreshing or F		
	TS indicator, input indicator	Internal I/O common	PNP
	ID4442 • TS	Rated input voltage	24 VDC (15 to 28.8 VDC)
	0 1	Input current	3.5 mA typical (at 24 VDC), rated current
Indicators	2 3 4 5 6 7	ON voltage/ON current	15 VDC min./3 mA min. (between IOG and each signal)
maioatoro		OFF voltage/OFF current	5 VDC max./1 mA max. (between IOG and each signal)
		ON/OFF response time	20 μs max./400 μs max.
		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
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Photocoupler isolation
Insulation resistance	$20~\text{M}\Omega$ 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 the NX bus	Current capacity of I/O power supply terminal	IOV: 0.1 A/terminal max.
NX Unit power consumption	Connected to a CPU Unit or Communication Control Unit 0.90 W max. Connected to a Communications Coupler Unit 0.50 W max.	Current consumption from I/O power supply	No consumption
Weight	65 g max.		
Circuit layout	Terminal block IN0 to IN7 NX bus connector (left) I/O power supply + NX bus connector (right)		
Installation orientation and restrictions	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		
Terminal connection diagram	Power Supply Unit A1 IOV IOV IOV IOV IOV IOV IOV IO	OG	
Disconnection/ Short-circuit detection	Not supported.	Protective function	Not supported.

		1	
Unit name	DC Input Unit	Model	NX-ID5342
Number of points	16 points	External connection terminals	Screwless clamping terminal block (16 terminals)
I/O refreshing method	Selectable Synchronous I/O refreshing or F		Lucu
	TS indicator, input indicator ID5342	Internal I/O common Rated input voltage	NPN 24 VDC (15 to 28.8 VDC)
	DTS	Input current	2.5 mA typical (at 24 VDC), rated current
	0 1 2 3 4 5 6 7 8 9 10 11	ON voltage/ON current	15 VDC min./2 mA min. (between IOG and each signal)
Indicators	12 13 14 15	OFF voltage/OFF current	5 VDC max./0.5 mA max. (between IOG and each signal)
		ON/OFF response time	20 μs max./400 μs max.
		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
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Photocoupler isolation
Insulation resistance	$20~\text{M}\Omega$ 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 the NX bus	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 0.90 W max. Connected to a Communications Coupler Unit 0.55 W max.	Current consumption from I/O power supply	No consumption
Weight	65 g max.		
Circuit layout		ent control circuit	I/O power supply + NX bus connector (right)
Installation orientation and restrictions	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		
Terminal connection diagram	IOV IOV		DC Input Unit NX-ID5342 B1
Disconnection/ Short-circuit detection	Not supported.	Protective function	Not supported.

Unit name	DC Input Unit	Model	NX-ID5442
Number of points	16 points	External connection terminals	Screwless clamping terminal block (16 terminals)
I/O refreshing method	Selectable Synchronous I/O refreshing or F	ree-Run refreshing	
	TS indicator, input indicator	Internal I/O common	PNP
	ID5442 ▶⊤S	Rated input voltage	24 VDC (15 to 28.8 VDC)
	0 1 2 3	Input current	2.5 mA typical (at 24 VDC), rated current
Indicators	4 5 6 7 8 9 10 11 12 13 14 15	ON voltage/ON current	15 VDC min./2 mA min. (between IOG and each signal)
mucators		OFF voltage/OFF current	5 VDC max./0.5 mA max. (between IOG and each signal)
		ON/OFF response time	20 μs max./400 μs max.
		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
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Photocoupler isolation
Insulation resistance	$20~\text{M}\Omega$ 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 the NX bus	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 0.90 W max. Connected to a Communications Coupler Unit 0.55 W max.	Current consumption from I/O power supply	No consumption
Weight	65 g max.		
Circuit layout	NX bus connector (left) I/O power supply +	t control cuit strength of country and control country and country	I/O power supply + NX bus connector (right)
Installation orientation and restrictions	Installation orientation: Connected to a CPU Unit or Communica Connected to a Communications Couple Restrictions: No restrictions		
Terminal connection diagram	IOV IOV		DC Input Unit NX-ID5442 B1 Two-wire sensor IN0 IN1
Disconnection/ Short-circuit detection	Not supported.	Protective function	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-F	Run refreshing	
	TS indicator, input indicators	Internal I/O common	For both NPN/PNP
		Rated input voltage	24 VDC (15 to 28.8 VDC)
	ID5142-1	Input current	7 mA typical (at 24 VDC)
Indicators	DTS 0 1 2 3 4 5 6 7	ON voltage/ON current	15 VDC min./3 mA min. (between COM and each signal)
	8 9 10 11 12 13 14 15	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 M Ω 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	Connected to a CPU Unit or Communication Control Unit 0.85 W max. Connected to a Communications Coupler Unit 0.55 W max.	Current consumption from I/O power supply	No consumption
Weight	125 g max.		
Circuit layout	Terminal block NX bus connector (left) NX bus connector (left) NX bus connector (left) NX bus connector (left) NX bus connector (right)		onnector

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: As shown in the following. · For upright installation Number of simultaneously ON input points Number of simultaneously ON input points vs. Ambient temperature characteristic 16 points at 45°C 16 12 points at 55°C 12 8 I/O power supply voltage 4 28.8 V 0 Installation orientation and 0 40 45 50 55 60 10 20 30 restrictions Ambient temperature (°C) · For any installation other than upright Number of simultaneously ON input points Number of simultaneously ON input points vs. Ambient temperature characteristic -16 points at 40°C 16 points at 45°C 16 12 12 points at 55°C I/O power supply voltage 8 ----24 V 7 points at 55°C 4 28.8 V 0 40 45 50 55 60 0 10 20 30 Ambient temperature (°C) Terminal Signal Name Signal Name IN0 A0 60 B0 ● IN1 IN2 A1 B1 . IN3 • A2 IN4 IN5 B2 • IN6 • A3 60 IN7 B3 • **Terminal connection** • A4 IN8 √o-B4 **●** IN9 diagram IN10 • A5 B5 🌲 IN11 60 •A6 IN12 √o IN13 B6 **●** IN14 A7 24 VDC 60 IN15 B7 **●** COM A8 B8 COM • The polarity of the input power supply can be connected in either direction. Disconnection/ Not supported. **Protective function** Not supported.

Short-circuit detection

● 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-F	Run refreshing	
	TS indicator, input indicators	Internal I/O common	For both NPN/PNP
	ID5142-5	Rated input voltage	24 VDC (15 to 28.8 VDC)
	₽TS	Input current	7 mA typical (at 24 VDC)
	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	ON voltage/ON current	15 VDC min./3 mA min. (between COM and each signal)
Indicators		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 M Ω 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	Connected to a CPU Unit or Communication Control Unit 0.85 W max. Connected to a Communications Coupler Unit 0.55 W max.		No consumption
Weight	85 g max.	•	
Circuit layout	Connector INO 3.3 kΩ Input indicator 3.3 kΩ I/O power supply 4 supply - I/O power supply		

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: As shown in the following. · For upright installation Number of simultaneously ON input points Number of simultaneously ON input points vs. Ambient temperature characteristic 16 points at 45°C 16 12 points at 55°C 12 8 I/O power supply voltage 4 28.8 V 0 Installation orientation and 0 10 20 40 45 50 55 60 restrictions Ambient temperature (°C) · For any installation other than upright Number of simultaneously ON input points Number of simultaneously ON input points vs. Ambient temperature characteristic 16 points at 40°C 16 points at 45°C 12 12 points at 45°C I/O power supply voltage 8 ----24 V 7 points at 55°C 4 **-**28.8 V 0 0 10 20 30 40 45 50 55 60 Ambient temperature (°C) Signal Connector name pin Signal name 24 VDC NC NC COM 3 4 COM 6 IN07 IN15 **IN14** 8 **IN06 Terminal connection** IN13 9 10 IN05 diagram 11 12 IN12 IN04 IN11 13 14 IN03 IN10 15 16 IN02 17 18 IN01 IN09 20 **IN08** 19 IN00 The polarity of the input power supply can be connected in either direction. Be sure to wire both pins 3 and 4 (COM), and set the same polarity for both pins. Disconnection/ **Protective function** Not supported. Not supported. Short-circuit detection

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-F	Run refreshing	
	TS indicator, input indicators	Internal I/O common	For both NPN/PNP
	ID6142-5	Rated input voltage	24 VDC (19 to 28.8 VDC)
	DTS	Input current	4.1 mA typical (24 VDC)
	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	ON voltage/ON current	19 VDC min./3 mA min. (between COM and each signal)
Indicators	16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	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 M Ω 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	Connected to a CPU Unit or Communication Control Unit 0.90 W max. Connected to a Communications Coupler Unit 0.60 W max.	Current consumption from I/O power supply	No consumption
Weight	90 g max.		
Circuit layout	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	I/O power supply + I/O power supply - NX bus connector (right)	

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: As shown in the following. · For upright installation Number of simultaneously ON input points vs. points Ambient temperature characteristic 35 32 points at 45°C of simultaneously ON input 30 32 points at 40°C 13 points/common at 55°C 25 20 10 points/common at 55°C 15 10 I/O power supply voltage ---24 V Number 5 28.8 V 0 Installation orientation and 0 20 30 40 45 50 55 60 10 restrictions Ambient temperature (°C) · For any installation other than upright Number of simultaneously ON input points vs. Ambient temperature characteristic points 32 points at 35°C 35 32 points at 50°C Number of simultaneously ON input 30 13 points/common at 55°C 32 points at 30°C -25 20 8 points/common at 55°C 15 I/O power supply voltage 10 ----19 V 5 points/common at 55°C 5 ---24 V 28.8 V 0 0 10 40 45 50 55 60 30 Ambient temperature (°C) Signal Connector Signal 24 VDC pin NC NC COM1 COM₁ IN31 6 IN23 IN30 8 IN22 IN29 9 10 IN21 IN28 11 12 IN20 IN27 14 IN19 **IN26** 15 | 16 | IN18 IN25 17 18 19 20 IN17 24 VDC **Terminal connection** NC COMO COM0 diagram **IN15** IN07 26 IN14 28 IN06 IN13 IN05 30 29 IN12 IN04 IN11 IN03 IN10 35 36 IN02 -60 38 IN01 IN09 37 IN08 39 40 IN00 The polarity of the input power supply can be connected in either direction.
Be sure to wire both pins 23 and 24 (COM0), and set the same polarity for both pins.
Be sure to wire both pins 3 and 4 (COM1), and set the same polarity for both pins. Disconnection/ Short-circuit detection Protective function Not supported. Not supported.

● DC Input Unit (Fujitsu 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 connector (40 terminals)
I/O refreshing method	Switching Synchronous I/O refreshing and Free-F	Run refreshing	
	TS indicator, input indicators	Internal I/O common	For both NPN/PNP
	ID6142-6	Rated input voltage	24 VDC (19 to 28.8 VDC)
	₽TS	Input current	4.1 mA typical (24 VDC)
Indicators	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	ON voltage/ON current	19 VDC min./3 mA min. (between COM and each signal)
	16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	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 M Ω 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	Connected to a CPU Unit or Communication Control Unit 0.95 W max. Connected to a Communications Coupler Unit 0.55 W max.	Current consumption from I/O power supply	No consumption
Weight	90 g max.		
Circuit layout	Connector Connector IN0 IN15 COM0 COM0 IN16 IN31 COM1 COM1 COM1 COM1 COM1 COM1 COM1 COM	I/O power supply + I/O power supply - NX bus connector (right)	

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: As shown in the following. · For upright installation Number of simultaneously ON input points vs. Number of simultaneously ON input points Ambient temperature characteristic 35 32 points at 45°C 30 32 points at 40°C 13 points/common at 55°C 25 20 10 points/common at 55°C 15 I/O power supply voltage 10 5 28.8 V 0 Installation orientation and 0 10 20 30 40 45 50 55 60 restrictions Ambient temperature (°C) · For any installation other than upright Number of simultaneously ON input points vs. Ambient temperature characteristic 32 points at 35°C Number of simultaneously ON input points 32 points at 50°C 30 13 points/common at 55°C 32 points at 30°C 25 20 8 points/common at 55°C 15 10 I/O power supply voltage ----19 V 5 points/common at 55°C 5 ---24 V -28.8 V 0 0 40 45 50 55 60 10 20 30 Ambient temperature (°C) Connector Signal name Signal name pin INO A1 B1 IN1 A2 B2 IN17 IN2 A3 B3 IN18 IN3 IN19 В4 A4 IN4 A5 B5 IN20 IN5 A6 B6 IN21 IN22 A7 B7 IN7 A8 B8 IN23 СОМО A9 В9 COM1 IN8 A10 B10 1N24 **Terminal connection** IN9 A11 B11 IN25 diagram IN10 A12 B12 IN26 IN11 A13 B13 IN27 IN12 A14 B14 IN28 A15 B15 IN29 IN13 A16 B16 IN30 IN15 A17 B17 IN31 COM0 A18 B18 COM1 A19 B19 NC NC NC A20 B20 NC The polarity of the input power supply can be connected in either direction.
Be sure to wire both pins A9 and A18 (COM0), and set the same polarity for both pins.
Be sure to wire both pins B9 and B18 (COM1), and set the same polarity for both pins. Disconnection/ Not supported. **Protective function** Not supported. Short-circuit detection

● 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	Screwless clamping terminal block
Capacity	Free-Run refreshing	terminals	(8 terminals)
Сараску	TS indicator, input indicator	Internal I/O common	No polarity
	IA3117	Rated input voltage	200 to 240 VAC, 50/60 Hz (170 to 264 VAC, ±3 Hz)
	□TS 0 1 2 3	Input current	9 mA typical (at 200 VAC, 50 Hz) 11 mA typical (at 200 VAC, 60 Hz)
Indicators	2 3	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: $20~M\Omega$ min. (at $500~VDC$) Between the external terminals and the functional ground terminal: $20~M\Omega$ min. (at $500~VDC$) Between the external terminals and internal circuits: $20~M\Omega$ min. (at $500~VDC$) Between the internal circuit and the functional ground terminal: $20~M\Omega$ 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	Connected to a CPU Unit or Communication Control Unit 0.80 W max. Connected to a Communications Coupler Unit 0.50 W max.	Current consumption from I/O power supply	No consumption
Weight	60 g max.		
Circuit layout	Terminal block IN0 to IN3		I/O power supply + NX bus connector (right)
Installation orientation and restrictions	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		
Terminal connection diagram	AC Input Unit NX-IA3117 A1	B1	
Disconnection/ Short-circuit detection	Not supported.	Protective function	Not supported.
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Digital Output Unit Specifications

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

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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		(o terrimais)
	TS indicator, output indicator	Internal I/O common	NPN
	OD2154	Rated voltage	24 VDC
	DD2134 DTS 0 1	Operating load voltage range	15 to 28.8 VDC
Indicators		Maximum value of load current	0.5 A/point, 1 A/Unit
		Maximum inrush current	
		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 M Ω 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.
	Connected to a CPU Unit		
NX Unit power consumption	0.85 W max. Connected to a Communications Coupler Unit 0.45 W max.	I/O current consumption	30 mA max.
Weight	70 g max.		
Circuit layout	NX bus connector (left) I/O power supply + I/O power supply - This unit uses a	push-pull output circuit.	OUT0 to OUT1 Terminal block I/O power supply + NX bus connector (right)
Installation orientation and restrictions	Installation orientation: Connected to a CPU Unit: Possible in upright installation. Connected to a Communications Coupler Unit: Possible in 6 orientations. Restrictions: No restrictions		
Terminal connection diagram	Additional I/O Power Supply Unit NX-OD2154 A1 IOV IOV IOV IOG IOG IOG IOG NC NC A8 B8 A8 B8 A8 B8 B8		
Disconnection/ Short-circuit detection	Not supported.	Protective function	Not supported.

NX-OD2258

Unit name	Transistar Outsut Unit	Model	NX-OD2258
Unit name	Transistor Output Unit	External connection	Screwless clamping terminal block
Number of points	2 points	terminals	(8 terminals)
I/O refreshing method	Output refreshing with specified time stamp)	
	TS indicator, output indicator	Internal I/O common	PNP
	OD2258	Rated voltage	24 VDC
	DTS 0 1	Operating load voltage range	15 to 28.8 VDC
Indicators		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.
	12 (11) 122 (11) 74 (7)	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 M Ω 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	Connected to a CPU Unit 0.85 W max. Connected to a Communications Coupler Unit 0.50 W max.	I/O current consumption	40 mA max.
Weight	70 g max.		
Circuit layout	NX bus connector (left) I/O power supply + Output I/O power supply - This unit uses a	push-pull output circuit.	OUT0 to OUT1 Terminal block I/O power supply + NX bus connector (right)
Installation orientation and restrictions	Installation orientation: Connected to a CPU Unit: Possible in up Connected to a Communications Couple Restrictions: No restrictions		ions.
Terminal connection diagram	Additional I/O Power Supply Unit A1 B1 OIOV IOV IOG IOG IOG IOG A8 B8	Transistor Output Unit NX-OD2258 A1 OUT0 OUT1 IOV IOV IOG IOG NC NC A8 B8	Three-wire type
Disconnection/ Short-circuit detection	Not supported.	Protective function	With load short-circuit protection.

NX-OD3121

Unit name	Transistor Output Unit	Model	NX-OD3121	
Number of points	4 points	External connection terminals	Screwless clamping terminal block (12 terminals)	
/O refreshing method	Selectable Synchronous I/O refreshing or F	Selectable Synchronous I/O refreshing or Free-Run refreshing		
	TS indicator, output indicator	Internal I/O common	NPN	
Indicators	OD3121	Rated voltage	12 to 24 VDC	
	●TS 0 1 2 3	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	12 (W) x 100 (H) x 71 (D)	Isolation method	Photocoupler isolation	
Insulation resistance	$20~\text{M}\Omega$ 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 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	Connected to a CPU Unit or Communication Control Unit 0.90 W max. Connected to a Communications Coupler Unit 0.55 W max.	I/O current consumption	10 mA max.	
Weight	70 g max.			
Circuit layout	NX bus connector (left) I/O power supply +		IOV0 to 3 OUT0 to OUT3 Terminal block I/O power supply + NX bus connector (right)	
Installation orientation and restrictions	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			
Terminal connection diagram	Additional I/O Power Supply Unit NX-OD3121 A1 B1 OUTO OUT1 OUT1 OUT1 OUT1 OUT1 OUT2 OUT3 OUT3 OUT2 OUT3 OUT2 OUT3 OUT2 OUT3 OUT2 OUT3 OUT2 OUT3 OUT2 OUT3 OUT3 OUT2 OUT3 OUT3 OUT2 OUT3 OUT2 OUT3 OUT2 OUT3 OUT2 OUT3 OUT2 OUT3 OUT2 OUT3 OUT3 OUT2 OUT3 OUT3 OUT2 OUT3 OUT2 OUT3 OUT2 OUT3 OUT2 OUT3 OUT3 OUT2 OUT3 OUT2 OUT3 OUT3 OUT2 OUT3 OUT2 OUT3 OUT2 OUT3 OUT2 OUT3 OUT2 OUT3 OUT2 OUT3 OUT3 OUT2 OUT3 OUT3 OUT2 OUT3 OUT3 OUT2 OUT3 OUT3 OUT3 OUT3 OUT3 OUT3 OUT3 OUT3			
Disconnection/ Short-circuit detection	Not supported.	Protective function	Not supported.	

NX-OD3153

Unit name	Transistar Output Unit	Model	NV 0D2452	
Unit name	Transistor Output Unit	Model External connection	NX-OD3153 Screwless clamping terminal block (12	
Number of points	4 points	terminals	terminals)	
I/O refreshing method	Selectable Synchronous I/O refreshing or Free-Run refreshing			
	TS indicator, output indicator	Internal I/O common	NPN	
Indicators	OD3153 ■TS	Rated voltage	24 VDC	
	0 1 2 3	Operating load voltage range	15 to 28.8 VDC	
		Maximum value of load current	0.5 A/point, 2 A/Unit	
		Maximum inrush current	- 1 , -	
		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 M Ω 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	Connected to a CPU Unit or Communication Control Unit 0.90 W max. Connected to a Communications Coupler Unit 0.50 W max.	I/O current consumption	30 mA max.	
Weight	70 g max.			
Circuit layout	NX bus connector (left) I/O power supply - This unit uses a push-	pull output circuit.	OUT0 to OUT3 Terminal block I/O power supply + I/O power supply - I/O power supply - I/O power supply - I/O power supply -	
Installation orientation and restrictions	 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 			
Terminal connection diagram	Additional I/O Power Supply Unit A1 B1 OV IOV IOG IOG IOG IOG A8 B8	Transistor Output Unit NX-OD3153 A1	Three-wire type	
Disconnection/ Short-circuit detection	Not supported.	Protective function	Not supported.	

Unit name	Transistor Output Unit	Model	NX-OD3256
		External connection	Screwless clamping terminal block (12
Number of points	4 points	terminals	terminals)
I/O refreshing method	Selectable Synchronous I/O refreshing or F	Internal I/O common	PNP
	TS indicator, output indicator OD3256	Rated voltage	24 VDC
	DTS	-	24 VDC
	0 1 2 3	Operating load voltage range	15 to 28.8 VDC
Indicators		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	12 (W) x 100 (H) x 71 (D)	Isolation method	Photocoupler isolation
Insulation resistance	20 M Ω 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	Connected to a CPU Unit or Communication Control Unit 0.90 W max. Connected to a Communications Coupler Unit 0.55 W max.	I/O current consumption	20 mA max.
Weight	70 g max.		
Circuit layout	NX bus connector (left) I/O power supply -	Short-circuit protection	OUT0 to OUT3 IOG0 to 3 I/O power supply + NX bus connector (right)
Installation orientation and restrictions	Installation orientation: Connected to a CPU Unit or Communica Connected to a Communications Couple Restrictions: No restrictions		
Terminal connection diagram	Additional I/O Power Supply Unit A1 B1 OIOV IOV IOG IOG A8 B8	Transistor Output Unit NX-OD3256 A1	Three-wire type
Disconnection/ Short-circuit detection	Not supported.	Protective function	With load short-circuit protection.

Unit name	Transistor Output Unit	Model	NX-OD3257
Number of points	4 points	External connection	Screwless clamping terminal block (12
•	·	terminals	terminals)
I/O refreshing method	Selectable Synchronous I/O refreshing or FTS indicator, output indicator	Internal I/O common	PNP
	OD3257	Rated voltage	24 VDC
	DTS	Operating load voltage	15 to 28.8 VDC
	0 1 2 3	range	13 to 26.6 VDC
Indicators		Maximum value of load current	0.5 A/point, 2 A/Unit
		Maximum inrush current	4.0 A/point, 10 ms max.
		Leakage current Residual voltage	0.1 mA max. 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	Dielectric strength	510 VAC between isolated circuits for 1
I/O power supply	100 VDC)	Current capacity of I/O	minute at a leakage current of 5 mA max. IOV: 0.5 A/terminal max.,
method	Supply from the NX bus	power supply terminal	IOG: 0.5 A/terminal max.
NX Unit power consumption	Connected to a CPU Unit or Communication Control Unit 0.85 W max. Connected to a Communications Coupler Unit 0.50 W max.	I/O current consumption	40 mA max.
Weight	70 g max.		
Circuit layout	NX bus connector (left) NX bus connector (left)	-pull output circuit.	IOV0 to 3 Terminal block OUT0 to OUT3 I/O power supply + NX bus connector (right)
Installation orientation and restrictions	Connected to a CPU Unit or Communications: Connected to a Communications Couple Restrictions: No restrictions		
Terminal connection diagram	Additional I/O Power Supply Unit A1 B1 IOV IOV IOV IOV IOV IOV IOG IOG A8 B8	Transistor Output Unit NX-OD3257 A1 B1 Two-wi	Three-wire type
Disconnection/ Short-circuit detection	Not supported.	Protective function	With load short-circuit protection.

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	
	TS indicator, output indicator	Internal I/O common	PNP
	OD3268	Rated voltage	24 VDC
	■TS 0 1	Operating load voltage range	15 to 28.8 VDC
Indicators	2 3	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	$20~\text{M}\Omega$ 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	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	Connected to a CPU Unit or Communication Control Unit 0.85 W max. Connected to a Communications Coupler Unit 0.50 W max.	Current consumption from I/O power supply	20 mA max.
Weight	70 g max.		
Circuit layout	NX bus connector (left) NX bus connector supply + 1/O power supply -	Short-circuit Short-circuit No No No No No No No No No No No No No	Terminal block UT 0 to OUT 3 G 0 to IOG 3 D power pply + D power pply - O power pply - O power pply - O power (right)
Installation orientation and restrictions	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		
Terminal connection diagram	Transistor Output Unit NX-OD3268 A1 OUT0 OUT1 IOV0 IOV1 IOG0 IOG1 OUT2 OUT3 IOV2 IOG2 IOG2 IOG3 COM (+V) COM (+V) A8 B8 B8 C • 0V has 2 terminals, so be sure to wire both terminals.		
Disconnection/ Short-circuit detection	Not supported.	Protective function	With load short-circuit protection.

Unit name	Transistor Output Unit	Model	NX-OD4121
Number of points	8 points	External connection	Screwless clamping terminal block (16
<u> </u>	· ·	terminals	terminals)
I/O refreshing method	Selectable Synchronous I/O refreshing or F TS indicator, output indicator	Internal I/O common	NPN
	OD4121	Rated voltage	12 to 24 VDC
	■TS 0 1	Operating load voltage range	10.2 to 28.8 VDC
Indicators	2 3 4 5 6 7	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.
	10 (11) 100 (11) 71 (7)	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	 Connected to a CPU Unit or Communication Control Unit 0.90 W max. Connected to a Communications Coupler Unit 0.55 W max. 	I/O current consumption	10 mA max.
Weight	70 g max.		
Circuit layout	NX bus connector (left) I/O power supply + I/O power supply -		IOV0 to 7 OUT0 to OUT7 Terminal block OUT0 to OUT7 NX bus connector (right)
Installation orientation and restrictions	Installation orientation: Connected to a CPU Unit or Communica Connected to a Communications Couple Restrictions: No restrictions		
Terminal connection diagram	Additional I/O Power Supply Unit A1 B1 OIOV IOV IOV IOV IOV IOV IOG IOG A8 B8	Connection Unit	2 OUT3 2 IOV3 4 OUT5 1 IOV5 OUT7 OUT7
Disconnection/ Short-circuit detection	Not supported.	Protective function	Not supported.

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 F	ree-Run refreshing	
	TS indicator, output indicator	Internal I/O common	PNP
	OD4256 ■TS	Rated voltage	24 VDC
	0 1 2 3	Operating load voltage range	15 to 28.8 VDC
Indicators	4 5 6 7	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.
	10 (11) 100 (11) 71 (15)	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 M Ω 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	Connected to a CPU Unit or Communication Control Unit 1.00 W max. Connected to a Communications Coupler Unit 0.65 W max.	I/O current consumption	30 mA max.
Weight	70 g max.		
Circuit layout	NX bus connector (left) I/O power supply -	Short-circuit protection	OUT0 to OUT7 Terminal block I/O power supply + NX bus connector (right)
Installation orientation and restrictions	Installation orientation: Connected to a CPU Unit or Communications Couple Restrictions: No restrictions		
Terminal connection diagram	Power Supply Unit A1 FIOV FIOS F	10G0 10 10G0 10 10U 10U 10G2 10 10U 10U 10G4 10 10U 10U 10G4 10 10U 10U 10U 10G4 10	Two-wire type JT1 G1 UT3 JT5 Three-wire type G5 G5
Disconnection/ Short-circuit detection	Not supported.	Protective function	With load short-circuit protection.

Unit name	Transistor Output Unit	Model	NX-OD5121
Number of points	16 points	External connection	Screwless clamping terminal block (16
	•	terminals	terminals)
/O refreshing method	Selectable Synchronous I/O refreshing or F TS indicator, output indicator	Internal I/O common	NPN
	OD5121	Rated voltage	12 to 24 VDC
	₽TS	Operating load voltage	
	0 1 2 3 4 5 6 7	range	10.2 to 28.8 VDC
Indicators	8 9 10 11 12 13 14 15	Maximum value of load current	0.5 A/point, 4 A/Unit
		Maximum inrush current	' '
		Leakage current	0.1 mA max.
		Residual voltage	1.5 V max.
Dimensions	12 (\M) × 100 (H) × 71 (D)	ON/OFF response time Isolation method	0.1 ms max./0.8 ms max.
Dimensions	12 (W) x 100 (H) x 71 (D) 20 MΩ min. between isolated circuits (at	isolation method	Photocoupler isolation 510 VAC between isolated circuits for 1
nsulation resistance	100 VDC)	Dielectric strength	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	Connected to a CPU Unit or Communication Control Unit 1.00 W max. Connected to a Communications Coupler Unit 0.65 W max.	I/O current consumption	20 mA max.
Weight	70 g max.		
Circuit layout	NX bus connector (left) I/O power supply + I/O power supply - Installation orientation:		OUT0 to OUT15 Terminal block I/O power supply + NX bus connector (right)
Installation orientation and restrictions	Connected to a CPU Unit or Communications Connected to a Communications Couple Restrictions: No restrictions		
Terminal connection diagram		/ IOV	Transistor Output
Disconnection/ Short-circuit detection	Not supported.	Protective function	Not supported.

Unit name	Transistor Output Unit	Model	NX-OD5256
Number of points	16 points	External connection terminals	Screwless clamping terminal block (16 terminals)
/O refreshing method	Selectable Synchronous I/O refreshing or F	ree-Run refreshing	
	TS indicator, output indicator	Internal I/O common	PNP
	OD5256	Rated voltage	24 VDC
	0 1 2 3 4 5 6 7	Operating load voltage range	15 to 28.8 VDC
Indicators	8 9 10 11 12 13 14 15	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	$20~\text{M}\Omega$ 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 the NX bus	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 1.10 W max. Connected to a Communications Coupler Unit 0.70 W max.	I/O current consumption	40 mA max.
Weight	70 g max.		
Circuit layout	NX bus connector (left) I/O power supply + I/O power supply -	Short-circuit protection	OUT0 to OUT15 Terminal block I/O power supply + NX bus connector (right)
Installation orientation and restrictions	Installation orientation: Connected to a CPU Unit or Communic: Connected to a Communications Couple Restrictions: No restrictions		
Terminal connection diagram	10V	North Connection Unit B1 A1 B1 A1 B1 A1 B1 A1 B1 A1 B1 A1 B1 A1 B1 A1 B1 A1 B1 A1 B1 A1 B1 A1 B1 A1 B1 A1 B1 A1 B1 A1 B1 A1 B1 A1 B1 A1 B1 A1 A1 B1 A1 A1 A1 A1	Transistor Output Unit NX-OD5256 B1 Two-wire type OUT0 OUT1 OUT2 OUT3 OUT4 OUT5 OUT6 OUT7 OUT8 OUT9 OUT10 OUT11 OUT12 OUT13 OUT14 OUT15 DUT14 OUT15 B8
Disconnection/ Short-circuit detection	Not supported.	Protective function	With load short-circuit protection.

● 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		
	TS indicator, output indicator	Internal I/O common	NPN
	OD5121-1	Rated voltage	12 to 24 VDC
	●TS 0 1 2 3 4 5 6 7	Operating load voltage range	10.2 to 28.8 VDC
Indicators	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	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 M Ω 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	Connected to a CPU Unit or Communication Control Unit 0.90 W max. Connected to a Communications Coupler Unit 0.60 W max.	Current consumption from I/O power supply	30 mA max.
Weight	125 g max.		
Circuit layout	NX bus connector (left) I/O power supply + I/O power supply -	COM I/O power supply + I/O power supply -	Terminal block Or NX bus connector (right)
Installation orientation and restrictions	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		
Terminal connection diagram	Terminal Signal name A B Signal name A Signal name A B Signal name A Signal name A B Signal name A Signal name Signa		
Disconnection/ Short-circuit detection	Not supported.	Protective function	Not supported.

NX-OD5256-1

Unit name	Transistor Output Unit	Model	NX-OD5256-1	
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			
	TS indicator, output indicator	Internal I/O common	PNP	
	OD5256-1	Rated voltage	24 VDC	
	DTS 0 1 2 3 4 5 6 7	Operating load voltage range	20.4 to 28.8 VDC	
Indicators	8 9 10 11 12 13 14 15	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	0.5 ms max./1.0 ms max.	
Dimensions	30 (W) x 100 (H) x 71 (D)	Isolation method	Photocoupler isolation	
Insulation resistance	20 M Ω 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	Connected to a CPU Unit or Communication Control Unit 0.95 W max. Connected to a Communications Coupler Unit 0.65 W max.	Current consumption from I/O power supply	30 mA max.	
Weight	125 g max.			
Circuit layout	NX bus connector (left) I/O power supply + I/O power supply -	Short-circuit protection of 1/0	Terminal block power ply + power poply - (right)	
Installation orientation and restrictions	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			
Terminal connection diagram	Signal name			
Disconnection/ Short-circuit detection	Not supported.	Protective function	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-F	Run refreshing	
	TS indicator, output indicator	Internal I/O common	NPN
	OD5121-5	Rated voltage	12 to 24 VDC
	DTS 0 1 2 3 4 5 6 7	Operating load voltage range	10.2 to 28.8 VDC
Indicators	8 9 10 11 12 13 14 15	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	$20~\text{M}\Omega$ 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	Connected to a CPU Unit or Communication Control Unit 0.95 W max. Connected to a Communications Coupler Unit 0.60 W max.	Current consumption from I/O power supply	30 mA max.
Weight	80 g max.		
Circuit layout	NX bus connector (left) Installation orientation:		Connector COM COM I/O power supply + I/O power supply – I/O power sup
Installation orientation and restrictions	Connected to a CPU Unit or Communication C Connected to a Communications Coupler Unit Restrictions: No restrictions	Control Unit: Possible in upright i : Possible in 6 orientations.	nstallation.
Terminal connection diagram	Signal name	Signal name +V COM OUT07 L OUT06 L OUT05 L OUT04 L OUT03 C OUT02 L OUT01 L OUT01 L OUT01 L OUT00 L	
Disconnection/Short-circuit detection	Not supported.	Protective function	Not supported.

NX-OD5256-5

Unit name	Transistor Output Unit	Model	NX-OD5256-5
		External connection	
Number of points	16 points	terminals	MIL connector (20 terminals)
I/O refreshing method	Switching Synchronous I/O refreshing and Free-I		
	TS indicator, output indicator	Internal I/O common	PNP
	OD5256-5	Rated voltage	24 VDC
	●TS 0 1 2 3 4 5 6 7	Operating load voltage range	20.4 to 28.8 VDC
Indicators	8 9 10 11 12 13 14 15	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.
Dimensions	20 (M) 400 (H) 74 (D)	ON/OFF response time	0.5 ms max./1.0 ms max.
Dimensions	30 (W) x 100 (H) x 71 (D) 20 MΩ min. between isolated circuits (at 100	Isolation method	Photocoupler isolation 510 VAC between isolated circuits for 1 minute at
Insulation resistance	VDC)	Dielectric strength	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	 Connected to a CPU Unit or Communication Control Unit 1.00 W max. Connected to a Communications Coupler Unit 0.70 W max. 	Current consumption from I/O power supply	40 mA max.
Weight	85 g max.		
Circuit layout	NX bus connector (left) I/O power supply + I/O power supply -	Short-circuit	COM (+V) COM (+V) COM (+V) OUT0 to OUT15 OV OV I/O power supply + I/O power supply - I/O power supply - I/O power supply - I/O power supply -
Installation orientation and restrictions	Installation orientation: Connected to a CPU Unit or Communication Connected to a Communications Coupler Unitestrictions: No restrictions	Control Unit: Possible in upright i t: Possible in 6 orientations.	nstallation.
Terminal connection diagram	Signal Connector pin 24 VDC COM (+V) 1 2 0V 3 4	0V OUT07 OUT06 L OUT05 OUT04 OUT03 C OUT02 C OUT01 C O	
Disconnection/Short-circuit detection	Be sure to wire both pins 3 and 4 (0V). Not supported.	Protective function	With load short-circuit protection.

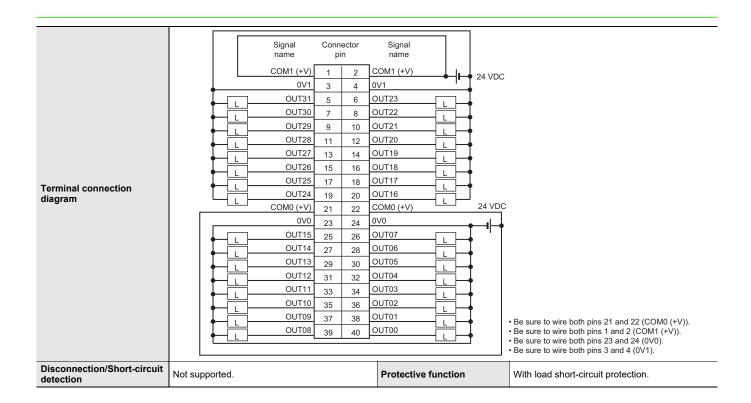
NX-OD6121-5

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-F	Run refreshing	
	TS indicator, output indicator	Internal I/O common	NPN
	OD6121-5	Rated voltage	12 to 24 VDC
	DTS 0 1 2 3 4 5 6 7	Operating load voltage range	10.2 to 28.8 VDC
Indicators	8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	Maximum value of load current	0.5 A/point, 2 A/common, 4 A/Unit
	24 25 26 27 28 29 30 31	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	Connected to a CPU Unit or Communication Control Unit 1.00 W max. Connected to a Communications Coupler Unit 0.80 W max.	Current consumption from I/O power supply	50 mA max.
Weight	90 g max.		
Circuit layout	Internal circuits	+V0 +V0 OUT0 to OUT18 COM0 +V1 +V1 +V1 OUT16 to OUT3*	Connector
	NX bus connector (left) I/O power supply +	I/O powe	r supply + NX bus connector (right)
Installation orientation and restrictions	Installation orientation: Connected to a CPU Unit or Communication Connected to a Communications Coupler Unit Restrictions: No restrictions		installation.

	1		
Terminal connection diagram	Signal name 24 VDC	Connector pin Signal name 1 2 +V1 3 4 COM1 5 6 OUT23 L 7 8 OUT22 L 9 10 OUT21 L 11 12 OUT20 L 13 14 OUT19 L 15 16 OUT18 L 17 18 OUT17 L 21 22 +V0 23 24 COM0 25 26 OUT07 L 27 28 OUT06 L 29 30 OUT05 L 31 32 OUT04 L 33 34 OUT03 L 37 38 OUT01 L 39 40 OUT00 L	Be sure to wire both pins 21 and 22 (+V0). Be sure to wire both pins 23 and 24 (COM0). Be sure to wire both pins 1 and 2 (+V1). Be sure to wire both pins 3 and 4 (COM1).
Disconnection/Short-circuit detection	Not supported.	Protective function	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-		
	TS indicator, output indicator	Internal I/O common	PNP
	OD6256-5	Rated voltage	24 VDC
	DTS 0 1 2 3 4 5 6 7	Operating load voltage range	20.4 to 28.8 VDC
Indicators	8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	Maximum value of load current	0.5 A/point, 2 A/common, 4 A/Unit
	24 25 26 27 28 29 30 31	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 M Ω 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	Connected to a CPU Unit or Communication Control Unit 1.30 W max. Connected to a Communications Coupler Unit 1.00 W max.	Current consumption from I/O power supply	80 mA max.
Weight	95 g max.	•	
Circuit layout	NX bus connector (left) I/O power supply +	Short-circuit protection protection	COM0 (+V) COM0 (+V) OUT0 to OUT15 OV0 OV0 COM1 (+V) COM1 (+V) COM1 (+V) VOUT16 to OUT31 OV1 OV1 OV1 OV1 OV1 OV1 OV1 O
Installation orientation and restrictions	Installation orientation: • Connected to a CPU Unit or Communication (• Connected to a Communications Coupler Uni Restrictions: No restrictions	Control Unit: Possible in upright t: Possible in 6 orientations.	installation.



● Transistor Output Unit (Fujitsu 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 connector (40 terminals)	
I/O refreshing method	Switching Synchronous I/O refreshing and Free-F		<u> </u>	
	TS indicator, output indicator	Internal I/O common	NPN	
	000101 0	Rated voltage	12 to 24 VDC	
	OD6121-6 ▶™	Operating load voltage range	10.2 to 28.8 VDC	
Indicators	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	Maximum value of load current	0.5 A/point, 2 A/common, 4 A/Unit	
	16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	Maximum inrush current	4.0 A/point, 10 ms max.	
	24 23 20 21 20 23 30 31	Leakage current	0.1 mA max.	
		Residual voltage	1.5 V max.	
D	00 (00) 400 (11) 74 (5)	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 M Ω 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	Connected to a CPU Unit or Communication Control Unit 1.10 W max. Connected to a Communications Coupler Unit 0.80 W max.	Current consumption from I/O power supply	50 mA max.	
Weight	90 g max.			
Circuit layout	NX bus connector (left) I/O power supply + I/O power supply -	ctor		
Installation orientation and restrictions	Installation orientation: Connected to a CPU Unit or Communication C Connected to a Communications Coupler Unit Restrictions: No restrictions		nstallation.	
Terminal connection diagram	12 to 24 VDC Signal name	12 to 24 VDC		
Disconnection/	Not supported.	Protective function	Not supported.	
Short-circuit detection				

● 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	terminais	
-	TS indicator, output indicator	Relay type	N.O. contact
Indicators	OC2633 TIS 0 1	Maximum switching capacity	250 VAC/2 A (cosφ = 1), 250 VAC/2 A (cosφ = 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: $20~\text{M}\Omega$ min. (500 VDC) Between the external terminals and internal circuits: $20~\text{M}\Omega$ min. (500 VDC) Between the internal circuit and GR terminal: $20~\text{M}\Omega$ min. (100 VDC) Between the external terminals and GR terminal: $20~\text{M}\Omega$ 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 ² 100 min each in X, Y, and Z directions (10 sweeps of 10 min each = 100 min total)	Shock resistance	100 m/s², 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.	l	
Circuit layout	NX bus connector (left) I/O power supply - You cannot replace	ply	0 to 1 Terminal block C0 to C1 I/O power supply + I/O power supply - I/O power supply -
Installation orientation and restrictions	Installation orientation: Connected to a CPU Unit or Communication C Connected to a Communications Coupler Unit: Restrictions: No restrictions		nstallation.
Terminal connection diagram	Relay Output Unit NX-OC2633 B1 Load 0 C0 Load NC NC NC NC NC NC		
Disconnection/ Short-circuit detection	Not supported.	Protective function	Not supported.

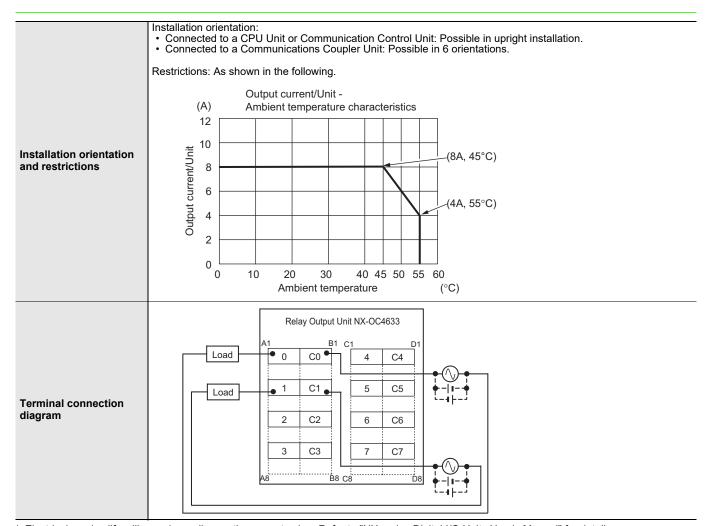
^{*} Electrical service life will vary depending on the current value. Refer to "NX-series Digital I/O Units User's Manual" for details.

NX-OC2733

Unit name	Relay Output Unit	Model	NX-OC2733	
Number of points	2 points, independent contacts	External connection	Screwless clamping terminal block (8	
I/O refreshing method	Free-Run refreshing	terminals	terminals)	
Indicators	TS indicator, output indicator OC2733 TS O 1	Maximum switching capacity Minimum switching	250 VAC/2 A (cosφ = 1), 250 VAC/2 A (cosφ = 0.4), 24 VDC/2 A, 4 A/Unit	
		capacity	5 VDC, 10 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 A1/3, B1/3 terminals and A5/7, B5/7 terminals: 20 M Ω min. (at 500 VDC) Between the external terminals and functional ground terminal: 20 M Ω min. (at 500 VDC) Between the external terminals and internal circuits: 20 M Ω min. (at 500 VDC) Between the internal circuit and the functional ground terminal: 20 M Ω min. (at 100 VDC)	Dielectric strength	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.	
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 1.30 W max. Connected to a Communications Coupler Unit 0.95 W max.	Current consumption from I/O power supply	No consumption	
Weight	70 g max.			
Circuit layout	You cannot r		NO0 to NO1 C0 to C1 Terminal block NC0 to NC1 I/O power supply + NX bus connector (right) I/O power supply - (right)	
Installation orientation and restrictions	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			
Terminal connection diagram	Relay Output Unit NX-OC2733 B1 Load NO0 NC0 C0 C0 NO1 NC1 C1 C1 A8 B8	Load		
Disconnection/Short-circuit detection	Not supported.	Protective function	Not supported.	

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

Unit name	Relay Output Unit	Model	NX-OC4633		
Number of points	8 points, independent contacts	External connection terminals	Screwless clamping terminal block (8 terminals x 2)		
I/O refreshing method	Free-Run refreshing				
Indicators	TS indicator, output indicator OC4633 TS 0 1	Relay type Maximum switching capacity	N.O. contact 250 VAC/2 A (cosφ = 1), 250 VAC/2 A (cosφ = 0.4), 24 VDC/2 A, 8 A/Unit		
	2 3 4 5 6 7	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	24 (W) x 100 (H) x 71 (D)	Isolation method	Relay isolation		
Insulation resistance	Between output bits: $20~\text{M}\Omega$ min. (at $500~\text{VDC}$) Between the external terminals and the functional ground terminal: $20~\text{M}\Omega$ min. (at $500~\text{VDC}$) Between the external terminals and internal circuits: $20~\text{M}\Omega$ min. (at $500~\text{VDC}$) Between the internal circuit and the functional ground terminal: $20~\text{M}\Omega$ min. (at $100~\text{VDC}$)	Dielectric strength	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.		
Vibration resistance	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 ² 100 min each in X, Y, and Z directions (10 sweeps of 10 min each = 100 min total)	Shock resistance	100 m/s ² , 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 2.00 W max. Connected to a Communications Coupler Unit 1.65 W max.	Current consumption from I/O power supply	No consumption		
Weight	140 g max.				
Circuit layout	NX bus connector (left) I/O power supply +	I/O power supply +			
	You cannot replace the relay.				



^{*} 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 of terminals	connection	2 MIL connectors (20 terminals)
I/O refreshing method	Switching Synchronous I/O refreshing and Free	-Run refresh	ning	
Internal I/O common	NPN		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	ı	Input current	7 mA typical (at 24 VDC)
Output section Maximum value of load current	0.5 A/point, 2 A/Unit	Input section	ON voltage/ON current	15 VDC min./3 mA min. (between COM and each signal)
(CN1) Maximum inrush current	4.0 A/point, 10 ms max.	(CN2)	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.			No filter, 0.25 ms, 0.5 ms, 1 ms (default), 2 ms,
ON/OFF response time	0.1 ms max./0.8 ms max.		Input filter time	4 ms, 8 ms, 16 ms, 32 ms, 64 ms, 128 ms, 256 ms
	TS indicator, I/O indicators	Dimensio		30 (W) x 100 (H) x 71 (D)
	MD6121-5	Isolation	method	Photocoupler isolation
	CN D TS	Insulation	resistance	20 M Ω min. between isolated circuits (at 100 VDC)
	L8 9 10 11 12 13 14 15	Dielectric		510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.
	2 8 9 10 11 12 13 14 15	I/O power supply method		Supply from external source
Indicators		Current capacity of I/O power supply terminal		Without I/O power supply terminals
		NX Unit p	ower consumption	Connected to a CPU Unit or Communication Control Unit 1.00 W max. Connected to a Communications Coupler Unit 0.70 W max.
		Current consumption from I/O power supply		30 mA max.
		Weight		105 g max.
Circuit layout	CN1 (left) output circuit NX bus connector (left) CN2 (right) input circuit Connector IN0 to IN15	to C C C Internal circuits A state of the st	OMO OMO OMO D power upply + D	

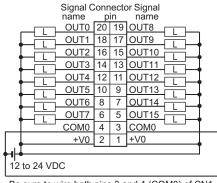
Installation orientation: Connected to a CPU Unit or Communication Control Unit: Possible in upright installation. Connected to a Communications Coupler Unit: Possible in 6 orientations. Restrictions: As shown in the following. • For upright installation Number of simultaneously ON input points Number of simultaneously ON input points vs. Ambient temperature characteristic 16 points at 35°C 16 points at 45°C 16 13 points at 55°C 12 9 points at 55°C I/O power supply voltage ---24 V 4 28.8 V 0 0 10 20 30 40 45 50 55 60 Installation orientation and Ambient temperature

restrictions

• For any installation other than upright

Number of simultaneously ON input points vs. Number of simultaneously ON input points Ambient temperature characteristic 16 points at 40°C 16 points at 25°C 16 12 I/O power supply 5 points at 55°C 8 voltage ---24 V 4 28.8 V 0 0 3 points at 55°C 10 30 40 45 50 55 60 Ambient temperature (°C)

CN1 (left) output terminal



Terminal connection diagram

- Be sure to wire both pins 3 and 4 (COM0) of CN1.
- Be sure to wire both pins 1 and 2 (+V0) of CN1.

CN2 (right) input terminal

							_
l –							
1 1	Signal C	onr	necto	or Signal			
24 VDC	name		in	name			
┃╷╼╟╼╷ ┃	NC	1	2	NC			
	COM1	3	4	COM1]	
	IN15	5	6	IN07	<u> </u>	<u></u>	_
	IN14	7	8	IN06	~	<u> </u>	_
	IN13	9	10	IN05	کہ	Ž	
	IN12	11	12	IN04	کہ	Ž	
	IN11	13	14	IN03	کہ	<u>~</u>	
	IN10	15	16	IN02	کہ	<u>~ </u>	_
	IN09	17	18	IN01	~	ζ	_
	IN08	19	20	IN00	کہ	<u>~ </u>	

- The polarity of the input power supply of CN2 can be connected in either direction.
 Be sure to wire both pins 3 and 4 (COM1) of CN2, and set the same polarity for both pins.

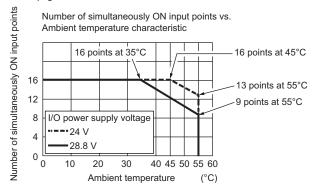
Disconnection/Short-circuit detection	Not supported.	Protective function	Not supported.
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NX-MD6256-5

Unit name	DC Input/Transistor Output Unit	Model		NX-MD6256-5	
Number of points	16 inputs/16 outputs	External of terminals	connection	2 MIL connectors (20 terminals)	
I/O refreshing method	Switching Synchronous I/O refreshing and Free	e-Run refresh	ning		
Internal I/O common	PNP		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)	
Output section Maximum value of load current	0.5 A/point, 2 A/Unit	Input section	ON voltage/ON current	15 VDC min./3 mA min. (between COM and each signal)	
(CN1) Maximum inrush current	4.0 A/point, 10 ms max.	(CN2)	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 ON/OFF response	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	
time	0.5 ms max./1.0 ms max.			4 113, 0 113, 10 113, 32 113, 04 113, 120 113, 230 113	
	TS indicator, I/O indicators	Dimensio	ns	30 (W) x 100 (H) x 71 (D)	
	MD6256-5	Isolation	method	Photocoupler isolation	
	CN_	Insulation	n resistance	20 M Ω min. between isolated circuits (at 100 VDC)	
	1 0 1 2 3 4 5 6 7 1 8 9 10 11 12 13 14 15 0 0 1 2 3 4 5 6 7	Dielectric	strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.	
	2 8 9 10 11 12 13 14 15		r supply method	Supply from external source	
Indicators		Current c	apacity of I/O power rminal	Without I/O power supply terminals	
		NX Unit power consumption Current consumption from I/ O power supply Weight		Connected to a CPU Unit or Communication Control Unit 1.10 W max. Connected to a Communications Coupler Unit 0.75 W max.	
				40 mA max.	
				110 g max.	
Circuit layout	NX bus connector (left) NX bus connector supply + I/O power supply - CN2 (right) input circuit	COM0 (+V) COM0 (+V) COM0 (+V) COM0 (+V) COM0 (+V) COnnector to OUT15 OV0 OV0 OV0 I/O power supply + I/O power supply - I/O power supply + I/O power supply + I/O power supply + I/O power supply - I/O powe			

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: As shown in the following.
 - For upright installation

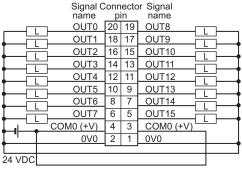


Installation orientation and restrictions

· For any installation other than upright

Number of simultaneously ON input points Number of simultaneously ON input points vs. Ambient temperature characteristic -16 points at 40°C 16 points at 25°C 16 12 I/O power supply 5 points at 55°C 8 voltage ----24 V 4 28.8 V 3 points at 55°C 0 0 10 20 30 40 45 50 55 60 Ambient temperature (°C)

CN1 (left) output terminal



Terminal connection diagram

- Be sure to wire both pins 3 and 4 (COM0 (+V)) of CN1.
- Be sure to wire both pins 1 and 2 (0V0) of CN1.

CN2 (right) input terminal

Signal C	onr	ecto	or Signal		
name	р	in	name		
NC	1	2	NC		
COM1	3	4	COM1		
IN15	5	6	IN07	<	<u></u>
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	_~	,
	name NC COM1 IN15 IN14 IN13 IN12 IN11 IN10 IN09	name	Name NC 1 2 2 3 4 1 1 5 6 1 1 1 1 1 1 1 1 1	NC 1 2 NC 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	Name

- The polarity of the input power supply of CN2 can be connected in either direction.
 Be sure to wire both pins 3 and 4 (COM1) of CN2, and set the same polarity for both pins.

Disconnection/Short-circuit detection	Not supported.	Protective function	With load short-circuit protection.
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● DC Input/Transistor Output Unit (Fujitsu Connector, 30 mm Width) NX-MD6121-6

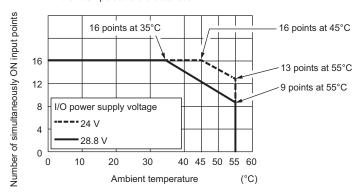
Unit name	e	DC Input/Transistor Output Unit	Model		NX-MD6121-6
Number o		16 inputs/16 outputs	External connection terminals		2 Fujitsu connectors (24 terminals)
I/O refres	hing method	Switching Synchronous I/O refreshing and Free-I	Run refreshi	ng	
	Internal I/O common	NPN		Internal I/O common	For both 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)
Output section	Maximum value of load current	0.5 A/point, 2 A/Unit	Input section	ON voltage/ON current	15 VDC min./3 mA min. (between COM and each signal)
(CN1)	Maximum inrush current	4.0 A/point, 10 ms max.	(CN2)	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.			
	ON/OFF response time	0.1 ms max./0.8 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
	<u> </u>	TS indicator, I/O indicators	Dimension	ns	30 (W) x 100 (H) x 71 (D)
		,	Isolation		Photocoupler isolation
		MD6121-6 CN DTS	Insulation	resistance	20 MΩ min. between isolated circuits (at 100 VDC)
		1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	Dielectric	strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.
		2 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	I/O power supply method		Supply from external source
Indicators	5	20 0 10 11 12 10 14 10	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 1.00 W max. Connected to a Communications Coupler Unit 0.70 W max.
			Current co	onsumption from supply	30 mA max.
			Weight		95 g max.
Circuit layout		NX bus connector (left) NX bus connector (left) CN1 (left) output circuit	W	+V0 +V0 OUT0 to OUT15 COM0 COM0 I/O power supply + I/O power supply –	Connector NX bus connector (right)
			ndicator	I/O power supply + I/O power supply -	NX bus connector (right)

- 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: As shown in the following.
 - For upright installation

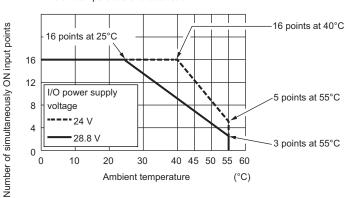
Number of simultaneously ON input points vs. Ambient temperature characteristic

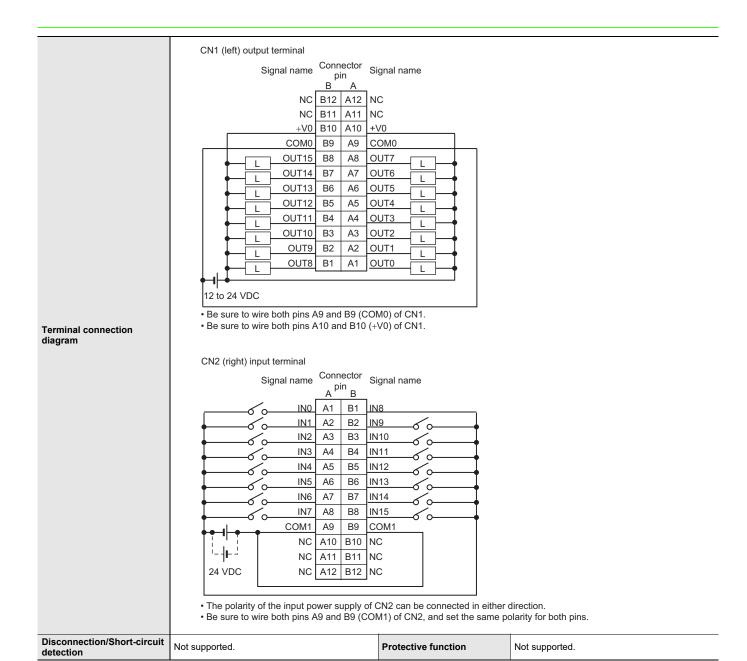


Installation orientation and restrictions

• For any installation other than upright

Number of simultaneously ON input points vs. Ambient temperature characteristic





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							
NX-ID5142-1							
NX-ID5142-5							
NX-ID5342							
NX-ID5442							
NX-ID6142-5							
NX-ID6142-6							
NX-IA3117							
NX-OD2154							
NX-OD2258							
NX-OD3121							
NX-OD3153							
NX-OD3256	Ver.1.0	Ver.1.13	Ver.1.17				
NX-OD3257							
NX-OD3268							
NX-OD4121							
NX-OD4256							
NX-OD5121							
NX-OD5121-1							
NX-OD5121-5							
NX-OD5256							
NX-OD5256-1							
NX-OD5256-5							
NX-OD6121-5							
NX-OD6121-6							
NX-OD6256-5							
NX-OC2633							
NX-OC2733							
NX-OC4633							
NX-MD6121-5							
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.1.05	Ver.1.06			
NX-ID3343		V 61.1.0	Ver. 1.00	Ver. 1.00			
NX-ID3344		Ver.1.1	Ver.1.06 *	Ver.1.07			
NX-ID3417		Ver.1.0	Ver.1.05	Ver.1.06			
NX-ID3443		V 61.1.0	ver.1.03	Ver. 1.00			
NX-ID3444		Ver.1.1	Ver.1.06 *	Ver.1.07			
NX-ID4342				Ver.1.06			
NX-ID4442	Ver.1.0			Ver. 1.00			
NX-ID5142-1				Ver.1.13			
NX-ID5142-5				Ver.1.10			
NX-ID5342		Ver.1.0	Ver.1.05	Ver.1.06			
NX-ID5442				V CI . I . UU			
NX-ID6142-5				Ver.1.10			
NX-ID6142-6				Ver.1.13			
NX-IA3117				Ver.1.08			
NX-OD2154		Ver.1.1	Ver.1.06 *	Ver.1.07			
NX-OD2258		V &1.1.1	V e1.1.00	Ver.1.07			
NX-OD3121							
IX-OD3153				Ver.1.06			
NX-OD3256				Ver. 1.00			
NX-OD3257							
NX-OD3268				Ver.1.13			
NX-OD4121							
NX-OD4256				Ver.1.06			
NX-OD5121			-				
NX-OD5121-1	Ver.1.0			Ver.1.13			
NX-OD5121-5		Ver.1.0	Ver.1.05	Ver.1.10			
NX-OD5256				Ver.1.06			
NX-OD5256-1				Ver.1.13			
NX-OD5256-5				Ver.1.10			
NX-OD6121-5				VEI.1.10			
NX-OD6121-6				Ver.1.13			
NX-OD6256-5				Ver.1.10			
IX-OC2633				Ver.1.06			
NX-OC2733				Ver.1.08			
NX-OC4633				Ver.1.17			
NX-MD6121-5				Ver.1.10			
NX-MD6121-6	Ver.1.0	Ver.1.0	Ver.1.05	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							
		Application with	n an NJ/NX/NY-ser *1	ies Controller	Application w	ith a CS/CJ/CF	P-series PLC *2		
Model	Unit version	EtherNet/IP Coupler Unit	CPU Unit or Industrial PC	Sysmac Studio	EtherNet/IP Coupler Unit	Sysmac Studio	NX-IO Configurator *3		
NX-ID3317		Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	Ver. 1.10	Ver. 1.00		
NX-ID3343		ver. r.z	Ver. 1.14	ver. 1.19	ver. r.u	ver. i.iu	ver. 1.00		
NX-ID3344									
NX-ID3417		Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	Ver. 1.10	Ver. 1.00		
NX-ID3443		Vel. 1.2	Vel. 1.14	Vei. 1.19	vei. i.u	vei. 1.10	ver. 1.00		
NX-ID3444									
NX-ID4342						Vor. 1.10			
NX-ID4442						Ver. 1.10			
NX-ID5142-1						Ver. 1.13			
NX-ID5142-5									
NX-ID5342		Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	V = = 4.40	Ver. 1.00		
NX-ID5442						Ver. 1.10			
NX-ID6142-5							_		
NX-ID6142-6						Ver. 1.13			
NX-IA3117						Ver. 1.10			
NX-OD2154									
NX-OD2258									
NX-OD3121									
NX-OD3153									
NX-OD3256	Ver. 1.0					Ver. 1.10	_		
NX-OD3257									
NX-OD3268						Ver. 1.13			
NX-OD4121									
NX-OD4256						Ver. 1.10			
NX-OD5121									
NX-OD5121-1						Ver. 1.13			
NX-OD5121-5									
NX-OD5256						Ver. 1.10			
NX-OD5256-1		Ver. 1.2	Ver. 1.14	Ver. 1.19	Ver. 1.0	Ver. 1.13	Ver. 1.00		
NX-OD5256-5									
NX-OD6121-5						Ver. 1.10			
NX-OD6121-6						Ver. 1.13			
NX-OD6256-5									
NX-OC2633						Ver. 1.10			
NX-OC2733									
NX-OC4633						Ver. 1.17			
NX-MD6121-5						Ver. 1.10			
NX-MD6121-6						Ver. 1.13			
NX-MD6256-5						Ver. 1.10	1		

- 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. 1.00	Ver. 1.24			
NX-ID3343		Ver. 1.00	Vel. 1.24			
NX-ID3344	Ver. 1.0					
NX-ID3417		Ver. 1.00	Ver. 1.24			
NX-ID3443		Ver. 1.00	ver. 1.24			
NX-ID3444						
NX-ID4342						
NX-ID4442						
NX-ID5142-1						
NX-ID5142-5						
NX-ID5342		Ver. 1.00	Ver. 1.24			
NX-ID5442						
NX-ID6142-5						
NX-ID6142-6						
NX-IA3117						
NX-OD2154						
NX-OD2258						
NX-OD3121						
NX-OD3153						
NX-OD3256						
NX-OD3257						
NX-OD3268	V 10					
NX-OD4121	Ver. 1.0					
NX-OD4256						
NX-OD5121						
NX-OD5121-1						
NX-OD5121-5						
NX-OD5256		Vor. 1.00	Vor. 1.24			
NX-OD5256-1		Ver. 1.00	Ver. 1.24			
NX-OD5256-5						
NX-OD6121-5						
NX-OD6121-6						
NX-OD6256-5						
NX-OC2633						
NX-OC2733						
NX-OC4633						
NX-MD6121-5						
NX-MD6121-6						
NX-MD6256-5						

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.

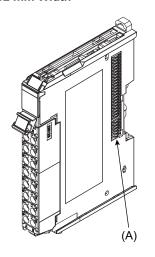
and versions.

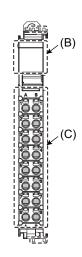
2. Note: You cannot connect the relevant NX Unit to the Communication Control Unit if "---" is shown in the corresponding unit versions/ versions column.

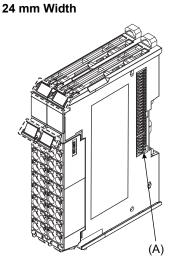
External Interface

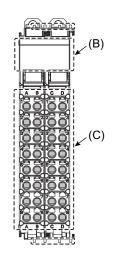
Screwless Clamping Terminal Block Type

12 mm Width



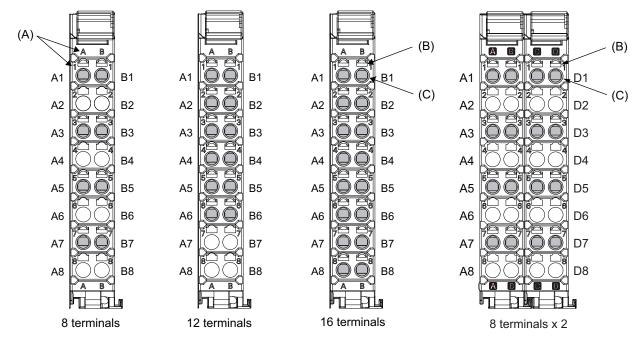






Letter	Item Specification			
(A) NX bus connector This connector is used to connect to another Unit.		This connector is used to connect to another Unit.		
(B) Indicators The indicators show the current operating status of the Unit.		The indicators show the current operating status of the Unit.		
(C)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

Terminal Blocks



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						
Unit model	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-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-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.

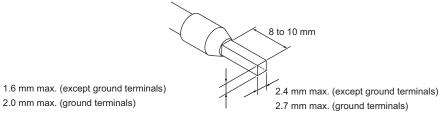
The applicable ferrules, wires, and crimping tools are listed in the following table.

Terminal type	Manufacturer	Ferrule model	Applicable wire (mm² (AWG))	Crimping tool
Terminals other	Phoenix Contact	AI0,34-8	0.34 (#22)	Phoenix Contact (The figure in parentheses is the applicable wire size.)
than ground terminals		AI0,5-8	0.5 (#20)	CRIMPFOX 6 (0.25 to 6 mm ² , AWG24 to 10)
terminais		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		
Ground terminals		AI2,5-10	2.0 *	
Terminals other	Weidmuller	H0.14/12	0.14 (#26)	Weidmuller (The figure in parentheses is the applicable wire size.)
than ground terminals		H0.25/12	0.25 (#24)	PZ6 Roto (0.14 to 6 mm ² , AWG 26 to 10)
terrilliais		H0.34/12	0.34 (#22)	
		H0.5/14	0.5 (#20)	
		H0.5/16	1	
		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	<u> </u>	

^{*} Some AWG 14 wires exceed 2.0 mm² 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



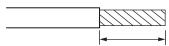
Using Twisted Wires/Solid Wires

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

Terminals		Wire type					0
Tem	reminas		Twisted wires		l wire	Wire size	Conductor length (stripping length)
Classification	Current capacity	Plated	Unplated	Plated	Unplated		(outphing forigin)
	2 A or less		Possible	Possible	Possible		
All terminals except ground terminals	Greater than 2 A and 4 A or less	Possible	Not	Possible *1	Not	0.08 to 1.5 mm ² AWG28 to 16	8 to 10 mm
	Greater than 4 A	Possible *1	Possible	Not Possible	Possible	7,000 10	
Ground terminals		Possible	Possible	Possible *2	Possible *2	2.0 mm ²	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.

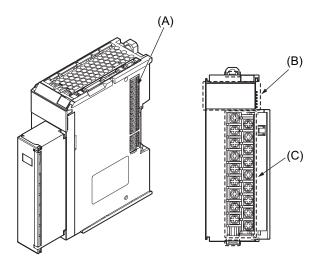
^{*2.} With the NX-TB□□□1 Terminal Block, use twisted wires to connect the ground terminal. Do not use a solid wire.



Conductor length (stripping length)

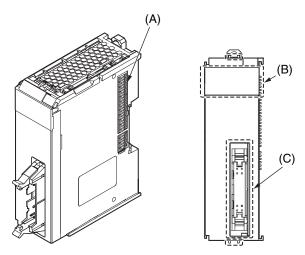
< Additional Information > If more than 2 A will flow on the wires, use plated wires or use ferrules.

M3 Screw Terminal Block Type 30 mm Width

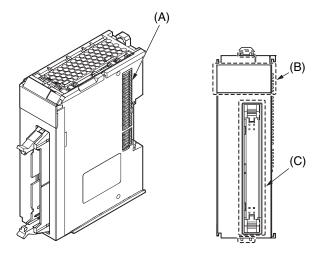


Letter	Item	Specification
(A) NX bus connector This connector is used to connect to another Unit.		This connector is used to connect to another Unit.
(B) Indicators The indicators show the current operating status of the Unit.		The indicators show the current operating status of the Unit.
(C) Screw terminals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

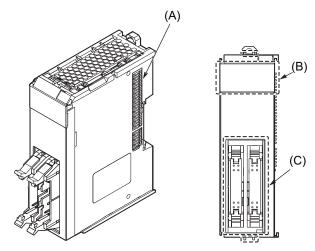
MIL Connector Type (1 Connector with 20 terminals) 30 mm Width



MIL Connector Type (1 Connector with 40 terminals) 30 mm Width

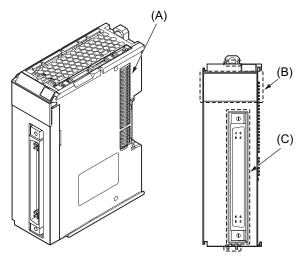


MIL Connector Type (2 Connectors with 20 terminals) 30 mm Width

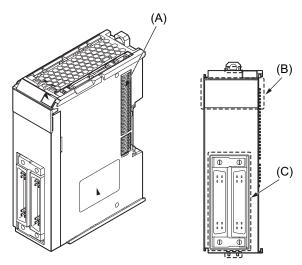


Letter	Item	Specification	
(A)	NX bus connector	This connector is used to connect to another Unit.	
(B)	Indicators	The indicators show the current operating status of the Unit.	
(C)	Connectors	The connectors are used to connect to external devices.	

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



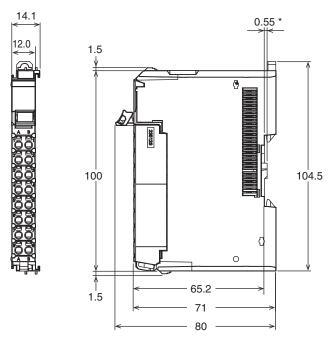
Fujitsu Connector Type (2 Connectors with 24 terminals) 30 mm Width



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.	

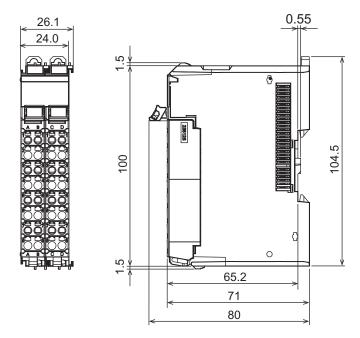
Dimensions (Unit/mm)

Screwless Clamping Terminal Block Type 12 mm Width

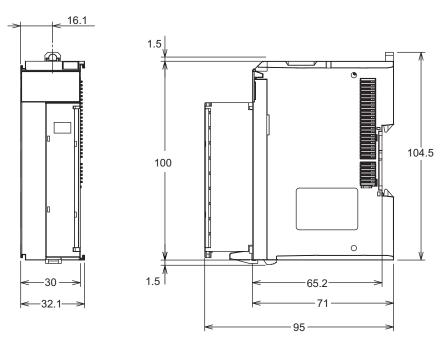


 $^{^{\}star}$ The dimension is 1.35 mm for Units with lot numbers through December 2014.

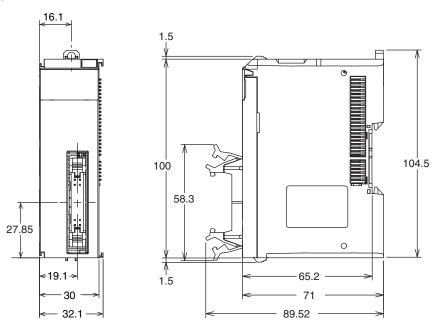
24 mm Width



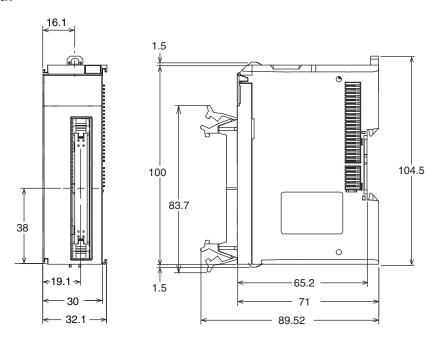
M3 Screw Terminal Block Type 30 mm Width



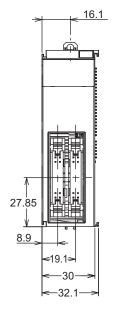
MIL Connector Type (1 Connector with 20 terminals) 30 mm Width

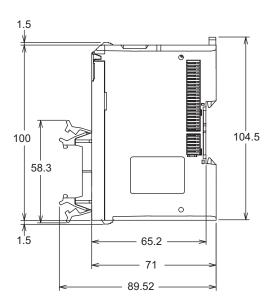


MIL Connector Type (1 Connector with 40 terminals) 30 mm Width

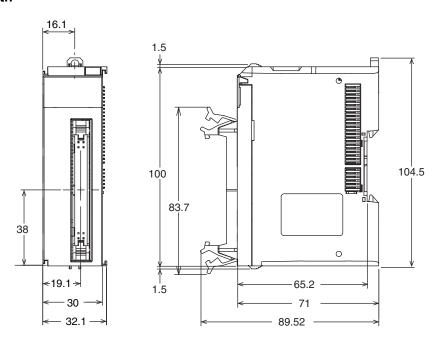


MIL Connector Type (2 Connectors with 20 terminals) 30 mm Width

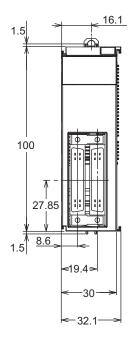


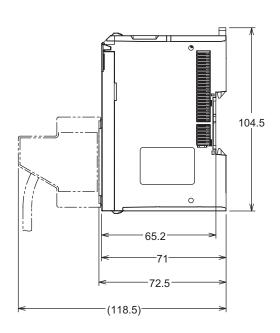


Fujitsu Connector Type (1 Connector with 40 terminals) 30 mm Width



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





Related Manual

Cat. No.	Model number	Manual name	Application	Description
W521	NX-ID	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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