mail

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



NX-series Analog I/O Unit

Analog inputs and outputs to meet all machine control needs, from general purpose to high-speed synchronous control

- Connect to other NX I/O Units and EtherCAT[®] Coupler Units using the high-speed NX-bus
- Separate modules for voltage and current



Features

- Up to eight analog inputs per unit (NX-AD)
- Up to four analog outputs per unit (NX-DA)
- Free-run refreshing or synchronous I/O refreshing with the NX1P2 CPU Unit or EtherCAT Coupler Unit
- \bullet Sampling times down to 10 μs per channel and high resolution of 1/30,000
- Single-ended or differential input (NX-AD)
- Selecting channel to use, moving average, input disconnection detection, over range/under range detection, and user calibration
- Detachable front connector with screwless Push-In Plus terminals for easy installation and maintenance
- Compact with a width of 12 mm per unit
- Connect to the CJ PLC using the EtherNet/IP[™] bus coupler

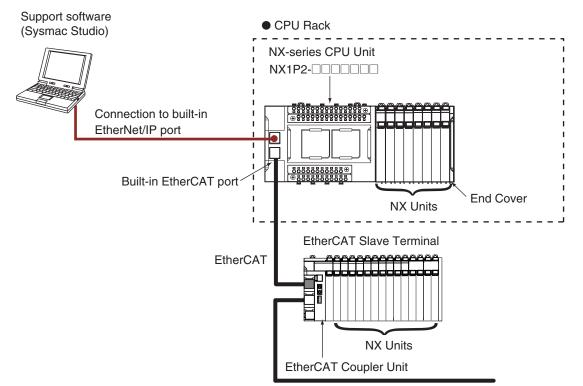
Sysmac is a trademark or registered trademark of OMRON Corporation in Japan and other countries for OMRON factory automation products. EtherCAT[®] is a registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany. EtherNet/IP[™] is a trademark of ODVA.

Other company names and product names in this document are the trademarks or registered trademarks of their respective companies.

System Configurations

Connected to a CPU Unit or Communication Control Unit

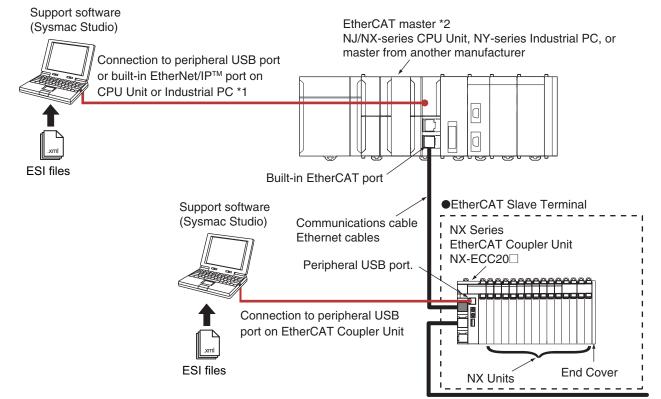
The following figure shows a system configuration when NX Units are connected to an NX-series CPU Unit.



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.

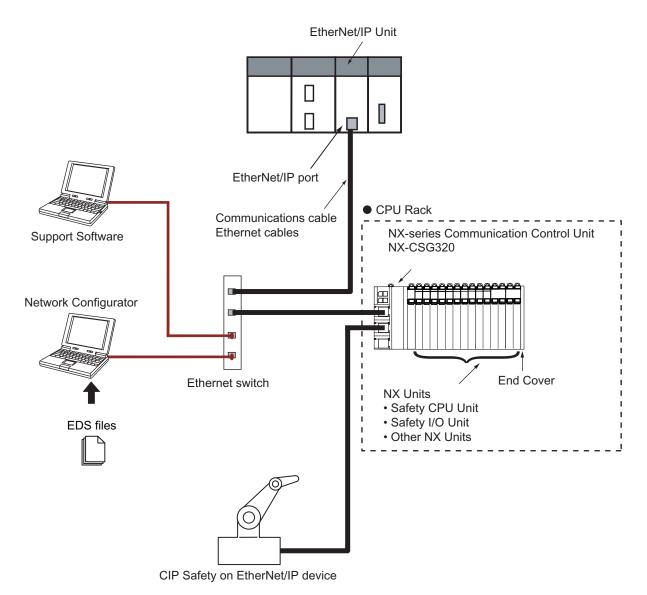


- *1. The connection method for the Sysmac Studio depends on the model of the CPU Unit or Industrial PC.
- *2. An EtherCAT Slave Terminal cannot be connected to any of the OMRON CJ1W-NC 81/82 Position Control Units even though they can operate as EtherCAT masters.

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

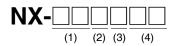
System Configuration in the Case of a Communication Control Unit

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.



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

(1)				
No.	Specification			
AD	Analog input			
DA	Analog output			

(2) Number of points

No.	Specification
2	2 points
3	4 points
4	8 points

(3) I/O range

(-)	- J-
No.	Specification
1	
2	4 to 20 mA
6	-10 to +10 V

(4) Other specifications Analog Input Units

				I/O refreshing method		
No.	Resolution	Conversion time	Input method	Free-Run refreshing *1 only	Switching synchronous I/O refreshing *2 and Free-Run refreshing	
03	1/8000	250 μs/point	Single-ended	Yes		
04	1/8000	250 μs/point	Differential	Yes		
08	1/30000	10 μs/point	Differential		Yes	

*1 Free-Run refreshing*2 Synchronous I/O refreshing

Analog Output Units

			I/O refreshing method			
No.	Resolution	Conversion time	Free-Run refreshing *1 only	Switching synchronous I/O refreshing *2 and Free-Run refreshing		
03	1/8000	250 μs/point	Yes			
05	1/30000	10 μs/point		Yes		

***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.

Analog Input Units

		1			Specificat	ion					
Product name	Number of points	Input range	Resolution	Conversion value, decimal number (0 to 100%)	Over all accuracy (25°C)	Input method	Conversion time	Input impedance	I/O refreshing method	Model	
					±0.2%	Single-ended input	250 μs/		Free-Run	NX-AD2603	
			1/8000	-4000 to 4000	(full scale)	Differential input	point		refreshing	NX-AD2604	
	2 points		1/30000	-15000 to 15000	±0.1% (full scale)	Differential input	10 μs/ point		Selectable Synchronous I/O refreshing or Free-Run refreshing	NX-AD2608	
Voltage Input type					±0.2%	Single-ended input	250 μs/		Free-Run	NX-AD3603	
		-10 to	1/8000	-4000 to 4000	(full scale)	Differential input	point		refreshing	NX-AD3604	
	4 points	+10 V	1/30000	-15000 to 15000	±0.1% (full scale)	Differential input	10 μs/ point	1 MΩ min.	Selectable Synchronous I/O refreshing or Free-Run refreshing	NX-AD3608	
				1/8000 -4000 to 4000	±0.2% (full scale)	Single-ended input	250 μs/		Free-Run refreshing	NX-AD4603	
	8 points		1/8000			Differential	point			NX-AD4604	
			1/30000	-15000 to 15000	±0.1% (full scale)	Differential input	10 μs/ point		Selectable Synchronous I/O refreshing or Free-Run refreshing	NX-AD4608	
	2 points	ints				±0.2%	Single-ended input	250 μs/		Free-Run	NX-AD2203
			1/8000	0 to 8000	(full scale)	Differential input	point		refreshing	NX-AD2204	
			1/30000	0 to 30000	±0.1% (full scale)	Differential input	10 μs/ point	250 Ω	Selectable Synchronous I/O refreshing or Free-Run refreshing	NX-AD2208	
Current Input type			1/8000	0.4- 0000	±0.2%	Single-ended input	250 μs/	- 250 12	Free-Run refreshing	NX-AD3203	
		4 to		0 to 8000	(full scale)	Differential input	point			NX-AD3204	
		4 to 20 mA	1/30000	0 to 30000	±0.1% (full scale)	Differential input	10 μs/ point		Selectable Synchronous I/O refreshing or Free-Run refreshing	NX-AD3208	
		1			±0.2%	Single-ended input	250 μs/		Free-Run	NX-AD4203	
			1/8000	0 to 8000	(full scale)	Differential	point		refreshing	NX-AD4204	
	8 points	8 points		1/30000	0 to 30000	±0.1% (full scale)	Differential	10 μs/ point	85 Ω	Selectable Synchronous I/O refreshing or Free-Run refreshing	NX-AD4208

Analog Output Units

	Specification							
Product name	Number of points	Output range	Resolution	Output setting value, decimal number (0 to 100%)	Over all accuracy (25°C)	Conversion time	I/O refreshing method	Model
Voltage Output type			1/8000	-4000 to 4000	±0.3% (full scale)	250 μs/point	Free-Run refreshing	NX-DA2603
	2 points	-10 to	1/30000	-15000 to 15000	±0.1% (full scale)	10 μs/point	Selectable Synchronous I/O refreshing or Free- Run refreshing	NX-DA2605
	4 points	+10 V	1/8000	-4000 to 4000	±0.3% (full scale)	250 μs/point	Free-Run refreshing	NX-DA3603
			1/30000	-15000 to 15000	±0.1% (full scale)	10 μs/point	Selectable Synchronous I/O refreshing or Free- Run refreshing	NX-DA3605
Current Output type	2 points		1/8000	0 to 8000	±0.3% (full scale)	250 μs/point	Free-Run refreshing	NX-DA2203
		4 to	1/30000	0 to 30000	±0.1% (full scale)	10 μs/point	Selectable Synchronous I/O refreshing or Free- Run refreshing	NX-DA2205
	4 points	20 mA	1/8000	0 to 8000	±0.3% (full scale)	250 μs/point	Free-Run refreshing	NX-DA3203
			1/30000	0 to 30000	±0.1% (full scale)	10 μs/point	Selectable Synchronous I/O refreshing or Free- Run refreshing	NX-DA3205

Optional Products

Product name		Specification			
Unit/Terminal Block Coding Pins	For 10 Units (Terminal Block: 30 pins,	or 10 Units erminal Block: 30 pins, Unit: 30 pins)			
	Specification				
Product name	No. of terminals	Terminal number indications	Ground terminal mark	Terminal current capacity	Model
	8	A/B	None	10 A	NX-TBA082
Terminal Block	12				NX-TBA122
	16	1			NX-TBA162

Accessories

Not included.

General Specifications

	Item	Specification			
Enclosure		Mounted in a panel			
Grounding m	ethod	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: Conforms to JIS B3502 and IEC 61131-2.			
Operating environment	Noise immunity	2 kV on power supply line (Conforms to IEC61000-4-4.)			
environment	Overvoltage category	Category II: Conforms to JIS B3502 and IEC 61131-2.			
	EMC immunity level	Zone B			
	Vibration resistance	Conforms to IEC 60068-2-6. 5 to 8.4 Hz with 3.5-mm amplitude, 8.4 to 150 Hz, acceleration of 9.8 m/s ² , 100 min each in X, Y, and Z directions (10 sweeps of 10 min each = 100 min total)			
	Shock resistance	IConforms to IEC 60068-2-27. 147 m/s ² , 3 times each in X, Y, and Z directions			
Applicable sta	andards *	cULus: Listed (UL508), ANSI/ISA 12.12.01, EU: EN 61131-2, C-Tick or RCM, KC Registration, NK, LR			

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

Analog Input Unit Specifications

Analog Input Unit (voltage input type) 2 points NX-AD2603

Unit name	Analog Input Unit (voltage input type)	Model	NX-AD2603				
Number of points	2 points	External connection terminals	Screwless clamping terminal block (8 terminals)				
/O refreshing method	Free-Run refreshing						
	TS indicator	Input method	Single-ended input				
	AD2603	Input range	-10 to +10 V				
		Input conversion range	-5 to 105% (full scale)				
Indicator		Absolute maximum rating	±15 V				
indicator		Input impedance	1 MΩ min.				
		Resolution	1/8000 (full scale)				
		Overall 25°C	±0.2% (full scale)				
		accuracy 0 to 55°C	±0.4% (full scale)				
		Conversion time	250 μs/point				
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Between the input and the NX bus: Powe = Transformer, Signal = Digital isolator (no isolation between inputs)				
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 1.35 W max. Connected to a Communications Coupler Unit 1.05 W max. 	I/O current consumption	No consumption				
Weight	70 g max.						
Circuit layout	Terminal block NX bus connector (left) I/O power supply + I/O power supply - I/O powe						
Installation orientation and restrictions		 Connected to a CPU Unit or Communication Control Unit: Possible in upright installation. Connected to a Communications Coupler Unit: Possible in 6 orientations. 					
Terminal connection diagram	Additional I/O Power Supply Unit Additional I/O Power Supply Unit A B1 Input + 24 VDC IOC IOC IOC IOC IOC IOC IOC IO						
Input disconnection	Not supported.						

Unit name	Analog Input Unit (voltage input type)	Model	NX-AD2604				
Number of points	2 points	External connection terminals	Screwless clamping terminal block (8 terminals)				
I/O refreshing method	Free-Run refreshing						
	TS indicator	Input method	Differential Input				
	AD2604	Input range	-10 to +10 V				
		Input conversion range	-5 to 105% (full scale)				
Indicator		Absolute maximum rating	±15 V				
Indicator		Input impedance	1 MΩ min.				
		Resolution	1/8000 (full scale)				
		Overall 25°C	±0.2% (full scale)				
		accuracy 0 to 55°C	±0.4% (full scale)				
		Conversion time	250 μs/point				
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Between the input and the NX bus: Power = Transformer, Signal = Digital isolator (no isolation between inputs)				
Insulation resistance	20 $M\Omega$ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.				
I/O power supply method	No supply	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 1.35 W max. Connected to a Communications Coupler Unit 1.05 W max. 	I/O current consumption	No consumption				
Weight	70 g max.						
Circuit layout	Terminal block Input1+ to 2+ Input1- to 2- AG AG AG AG AG AG AG AG AG AG						
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	Voltage Input Unit NX-AD2604 A1 B1 Input + Input1+ Input2+ AG AG AG AG NC NC AG terminal is connected to 0 V of analog circuit inside the Unit. AG to 0 V of analog circuit inside the Unit. It is not necessary to wire AG terminal normally.						
Input disconnection detection	Not supported.						

Analog Input Unit (voltage input type) 2 points NX-AD2604

Unit name	Analog Input Unit (voltage input type)		NX-AD2608				
	Analog input onit (voltage input type)	Model External c	onnection	Screwless clamping terminal block (8			
Number of points	2 points	terminals		terminals)			
I/O refreshing method	Selectable Synchronous I/O refreshing or F		-				
	TS indicator	Input meth		Differential Input			
	AD2608	Input rang		-10 to +10 V			
		•	version range	-5 to 105% (full scale)			
Indicator		Absolute r rating	naximum	±15 V			
		Input impe	dance	1 MΩ min.			
		Resolution		1/30000 (full scale)			
		Overall	25°C	±0.1% (full scale)			
			0 to 55°C	±0.2% (full scale)			
		Conversio	n time	10 μs/point			
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation n	nethod	Between the input and the NX bus: Power = Transformer, Signal = Digital isolator (no isolation between inputs)			
Insulation resistance	20 $M\Omega$ min. between isolated circuits (at 100 VDC)	Dielectric	strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.			
I/O power supply method	No supply		pacity of I/O	Without I/O power supply terminals			
NX Unit power consumption	 Connected to a CPU Unit or Communication Control Unit 1.35 W max. Connected to a Communications Coupler Unit 1.05 W max. 	I/O current consumption		No consumption			
Weight	70 g max.						
Circuit layout	$Terminal block \begin{bmatrix} Input1+ to 2+ \\ Input1- to 2- \\ AG \\ A$						
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	Voltage Input Unit NX-AD2608 A1 Input1+ Input2+ Input1- Input2- Input1- Input2- AG AG NC NC A6 terminal is connected to 0 V of analog circuit inside the Unit. It is not necessary to wire AG terminal normally.						
Input disconnection detection	Not supported.						

Analog Input Unit (voltage input type) 2 points NX-AD2608

Unit name	Analog Input Unit (voltage input type)	Model		NX-AD	
Number of points	4 points	External connection terminals		termina	ess clamping terminal block (12 als)
I/O refreshing method	Free-Run refreshing			- · ·	
	TS indicator	Input meth			ended input
	AD3603	Input range		-10 to -	-
		•	ersion range	-5 to 10	05% (full scale)
Indicator		Absolute n rating		±15 V	
indicator		Input impe		1 MΩ r	
		Resolution			(full scale)
		Overall	25°C		(full scale)
		accuracy	0 to 55°C		(full scale)
		Conversio	n time	250 μs	
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation m	nethod	= Trans	en the input and the NX bus: Power sformer, Signal = Digital isolator (no n between inputs)
Insulation resistance	20 M Ω min. between isolated circuits (at 100 VDC)	Dielectric s	strength		C between isolated circuits for 1 at a leakage current of 5 mA max.
I/O power supply method	Supply from the NX bus		pacity of I/O ply terminal		1 A/terminal max., 0.1 A/terminal max.
NX Unit power consumption	 Connected to a CPU Unit or Communication Control Unit 1.35 W max. Connected to a Communications Coupler Unit 1.10 W max. 	I/O current	consumption	No cor	sumption
Weight	70 g max.				
Circuit layout	Terminal block IND Input1+ to 4+ IOG AG AG: Analog circuit internal GND I/O power supply + I/O power supply + I/O power supply - I/O power supply - I/O power supply - I/O power supply -				connector
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 IOV IOV IOV IOV IOV IOV IOV IOV	Voltage Input Unit NX-AD3603 A Input1+ Input2+ IOV IOV IOG IOG Input3+ Input4+ IOV IOV IOG IOG A8 B8			
Input disconnection detection	Not supported.				

Analog Input Unit (voltage input type) 4 points NX-AD3603

Unit name	Analog Input Unit (voltage input type)	Model	NX-AD3604		
		External connection	Screwless clamping terminal block (12		
Number of points	4 points	terminals	terminals)		
I/O refreshing method	Free-Run refreshing		Г		
	TS indicator	Input method	Differential Input		
	AD3604 ■TS	Input range	-10 to +10 V		
		Input conversion range	-5 to 105% (full scale)		
Indicator		Absolute maximum rating	±15 V		
Indicator		Input impedance	1 MΩ min.		
		Resolution	1/8000 (full scale)		
		Overall 25°C	±0.2% (full scale)		
		accuracy 0 to 55°C	±0.4% (full scale)		
		Conversion time	250 μs/point		
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Between the input and the NX bus: Power = Transformer, Signal = Digital isolator (no isolation between inputs)		
Insulation resistance	20 $M\Omega$ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.		
I/O power supply method	No supply	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 1.35 W max. Connected to a Communications Coupler Unit 1.10 W max. 	I/O current consumption	No consumption		
Weight	70 g max.				
Circuit layout	$\begin{array}{c c} \mbox{Terminal block} & \mbox{Input1+ to 4+} & \mbox{AMP} & \mbox{AMP} & \mbox{AMP} & \mbox{AMP} & \mbox{AG} & $				
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	Voltage Input Unit NX-AD3604 A A Input1+ Input1- Input2- Input3- Input4+ Input3- Input4- AG AG AG AG AG AG Imput3- Input4- Imput3- Input4- Imput3- Input4- Imput3- Input4- Imput3- Input4- Imput3- Input4- Imput3- Imput4- Imput3- Imput3- Imput3- Imput3- <t< th=""></t<>				
Input disconnection detection	Not supported.				
	l				

Analog Input Unit (voltage input type) 4 points NX-AD3604

		Madal			
Unit name	Analog Input Unit (voltage input type)	Model	NX-AD3608		
Number of points	4 points	External connection terminals	Screwless clamping terminal block (12 terminals)		
I/O refreshing method	Selectable Synchronous I/O refreshing or Free-Run refreshing				
	TS indicator AD3608	Input method	Differential Input		
		Input range	-10 to +10 V		
		Input conversion range Absolute maximum	-5 to 105% (full scale)		
Indicator		rating	±15 V		
indicator		Input impedance	1 MΩ min.		
		Resolution	1/30000 (full scale)		
		Overall 25°C	±0.1% (full scale)		
		accuracy 0 to 55°C	±0.2% (full scale)		
		Conversion time	10 µs/point		
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Between the input and the NX bus: Power = Transformer, Signal = Digital isolator (no isolation between inputs)		
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	No supply	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 1.45 W max. Connected to a Communications Coupler Unit 1.10 W max. 	I/O current consumption	No consumption		
Weight	70 g max.				
Circuit layout	Terminal block $\begin{bmatrix} Input1+ to 4+ \\ Input1- to 4- \\ AG \\ A$				
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	Voltage Input Unit NX-AD3608 1 B1 Input1+ Input2+● Input + Input3+ Input4+ Input4- AG AG AG AG AG AG AG AG Input3+ Input4- Input4- Input3- Input4- Input5- Input3- Input4- Input5- Input5- Input5- Input5- Input5- Input5- Input5- Input5- Input5- Input5- Input5-				
Input disconnection detection	Not supported.				
	1				

Analog Input Unit (voltage input type) 4 points NX-AD3608

Unit name	Analog Input Unit (voltage input type)	Model	NX-AD4603		
		External connection	Screwless clamping terminal block (16		
Number of points	8 points	terminals	terminals)		
I/O refreshing method	Free-Run refreshing				
	TS indicator	Input method	Single-ended input		
	AD4603	Input range	-10 to +10 V		
		Input conversion range	-5 to 105% (full scale)		
Indiaatar		Absolute maximum rating	±15 V		
Indicator		Input impedance	1 MΩ min.		
		Resolution	1/8000 (full scale)		
		Overall 25°C	±0.2% (full scale)		
		accuracy 0 to 55°C	±0.4% (full scale)		
		Conversion time	250 μs/point		
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Between the input and the NX bus: Power = Transformer, Signal = Digital isolator (no isolation between inputs)		
Insulation resistance	20 $M\Omega$ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.		
I/O power supply method	Supply from 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 1.45 W max. Connected to a Communications Coupler Unit 1.15 W max. 	I/O current consumption	No consumption		
Weight	70 g max.	ax.			
Circuit layout	Terminal block Input1+ to 8+ IOG NX bus connector (left) 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	010G 10G 10V 1 24 VDC 10V 10V 1 10V 10V 10V 1 10V 10V 10V 1 10V 10V 10V 1 10Q 10V 10V 1 10Q 10G 10G 10V 1	Supply n Unit Voltage Input Unit NX-AD4603 B1 A1 IOV Input1+ Input2+ IOV Input3+ Input4+ IOV Input5+ Input6+ IOV Input7+ Input8+ IOV IOG IOV Input7+ Input8+ IOV IOG			
Input disconnection detection	Not supported.				

Analog Input Unit (voltage input type) 8 points NX-AD4603

Number of points # points External connection imput method Screwkess champing its minal block (16 timput manage). VO refreshing method Free-Run refreshing Imput method imput range Differential input imput method Differential input imput method Indicator AD1000 **********************************						
Number of points 0 joints 0 joints 0 joints 0 joints 1 joint jet minals jet minals indicator 15 indicator 15 indicator 15 indicator 10 force of a link 10 force of a link indicator 12 (W) x 100 (H) x 71 (D) 10 loss 25'C 42.3% (full scale) inductor resistance 12 (W) x 100 (H) x 71 (D) isolation method 25'D isolation insulation resistance 20 M2 min. between isolated circuits (at 1.4% W max. Delectric strength 510 VXC between scalated circuits (at 1.4% W max. V/O power supply No supply Current capacity of V/O were augely terminals 50 isolated circuits for 1 method NX Unit power consumption Connected to a CPU Unit or consumption No consumption No consumption No consumption No consumption No consumption Connected to a CPU Unit or consumption Connected to a Communications consumption Solation munication Control Unit 1.4% W max. Connected to a Communications U/O current consumption No consumption Installation orientations: Connected to a Communication Control Unit. Possible in upd(h) installation. Connected to a Communication Control Unit. Possible in upd(h) installation.	Unit name	Analog Input Unit (voltage input type)	Model	NX-AD4604		
Indicator TS indicator Input method Differential Input Indicator AD363/1 Input method Differential Input Input method 10 to 10 V Input method 10 to 10 V Absolute maximum a15 V Input medance 1 Ma min. Resolution 1 800 (Mil Scale) Overaid 257 do 108% (full scale) Overaid 257 do 108% (full scale) Overaid 250 (Mil Scale) Store supply 20 M2 min. between isolated circuits (at 100 VC) Insulation resistance 20 M2 min. between isolated circuits (at 100 VC) V0 power supply No supply No supply No supply No supply Connected to a CPU Unit or Communications Computed in Communications Computed in Communications Computed in the MX bus: Power supply terminal NUmit power supply No consumption No supply 10 power supply terminal internal CND Weight 70 g max. Installation orientation: . Connected to a CPU Unit or Communication Control Unit 1 40 W max. Installation orientation: . Connected to a CPU Unit or Communication Control Unit 1 40 W max. Weight 70 g max. Installation orientation: . Connected to a CPU Unit or Communication Control Unit Possible in upright installation. . Circuit layout <th>Number of points</th> <th></th> <th></th> <th></th>	Number of points					
Indicator Imput range 1016-10 V Indicator Imput conversion range 3 to 105% (full scale) Indicator Indicator 145 V Imput impedance 1 MAI min. Resolution 1 M2 min. Owerall 250 155% (full scale) Overall 250 155% (full scale) Overall 250 155% (full scale) Overall 250 155% (full scale) Owerall 250 155% (full scale) Insulation resistance 20 M2 min. between isolated circuits (at 100 VOC) VO power supply No supply No supply Current cospectity of V/O power supply terminals NX Unit power Connected to a CPU Unit or Consumption Consumption Consumption NX Unit power Communications Upput result 0 ower supply Weight 70 g max. Circuit layout Imput resolution Maximal 10 gover supply No and power supply Imput resolution Not and power supply Imput resolution <th>I/O refreshing method</th> <th colspan="5"></th>	I/O refreshing method					
Indicator Input decoversion range Absolute maximum rating -5 to 105% (ull scale) Input (mpedance 1 MQ min. Resolution 1/8000 (tull scale) Overall 25°C 40.2% (tull scale) Insulation resistance 20 M2 min balated circuits (at 100 VPC) Dielectric strength Insulation cells to a CPU Unit or Connected to a CPU Unit or Connected to a CPU Unit or Coupler Unit Current consumption No consumption NX Unit power consumption * Connected to a CPU Unit or Coupler Unit No consumption No consumption Vio gover supply * Connected to a Communication Coupler Unit No consumption No consumption No consumption * Connected to a CPU Unit or Communication Coupler Unit No consumption No consecuted of the power supply </th <th></th> <th></th> <th>-</th> <th></th>			-			
Indicator Assolute maximum =15 V Input impediance 1 M02 min. Resolution 170000 (til scale) Overall 25°C =0.2% (til scale) Overall 25°C =0.4% (til scale) Conversion time Batwace nite input and the NX bus: Power Insulation resistance 20 M2 min between isolated circuits (at 100 VOC) Delectric strength NV unit power supply No supply Conversion time Batwace nite input and the NX bus: Power isolation between isolated circuits (at 100 VOC) NX Unit power 20 M2 min between isolated circuits (at 100 VOC) Delectric strength Without I/O power supply terminals NX Unit power - Connected to a CPU Unit or Communication Control Unit - Connected to a CPU Unit or Communication - Connected to a CPU Unit or Communication Control Unit - Connected to a CPU Unit or Communication Control Unit - Connected to a CPU Unit or Communication Control Unit - Connected to a CPU Unit or Communication Control Unit - Connected to a CPU Unit or Communication Control Unit - Connected to a CPU Unit or Communication Control Unit - Connected to a CPU Unit or Communication Control Unit - Connected to a CPU Unit or Communication Control Unit - Connected to a CPU Unit or Communication Control Unit - Connected to a CPU Unit or Communication Control Unit - Connected to a CPU Unit or Communi			• •			
Indicator Implied impedance 140 min. Implied impedance 140 min. Resolution 178000 (tull scale) Overall 25°C 40.2% (tull scale) Oursensions 12 (W) × 100 (H) × 71 (D) isolation method Insulation resistance 20 M2 min. between isolated circuits (at 100 VPC) Dielectric strength 510 VAC between isolated circuits of 1 minute at a leakage current of 5 m max. VO power supply No supply Current capacity of I/O power supply terminals Without I/O power supply terminals NX Unit power 0.50 connected to a CPU Unit or Communication Control Unit 1 + 0.5 W max. VO current consumption No consumption VO gover supply 0.60 connected to a CPU Unit or Communication Control Unit 1 + 0.5 W max. VO current consumption No consumption Weight 70 g max. VO gover supply Imput impedance No consumption Installation orientation: Installation orientation: Connected to a CPU Unit or Communication Control Unit 1 + 10.5 W max. AG: Analog circuit internel GND No consumption With the formation: Installation orientation: Installation orientation: Connected to a CPU Unit or Communication Control Unit: Possible in Gorientation: - Connected to a CPU Unit or Communication Control Unit: Possible in Gorientation: - Connected to a CPU Unit or Communication Control Unit: Possible in Gorientation: - Connected to a CPU Unit or Communication Control Unit: Possible in Gorienta			•			
Input impedance 1 MJ min. Provide the second of the se	Indicator		rating	±15 V		
Overall accuracy 25°C 0 to 55°C ±0.2% (full scale) Dimensions 12 (W) x 100 (H) x 71 (D) Isolation method Between the put and the NX bus: Power = Transformer, Signal = Digital isolated circuits (at 100 VDC) Dielectric strength S10 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max. VD power supply No supply No supply Current capacity of UO power supply terminals Without I/O power supply terminals NX Unit power consumption Connected to a CPU Unit or consumption Connected to a Communications Couplet Unit The W max. VD current consumption No consumption No consumption No consumption Connected to a CPU Unit or consumption No consumption No tag Installation orientation:						
Image: conversion time add% (full scale) Dimensions 12 (W) x 100 (H) x 71 (D) isolation method Between the input and the NX bus: Power = Transformer. Signal = Digital isolator (no isolation between isolated circuits (at 0 VO Ox) Delectric strength 510 VXD Extrement of 5 nm max. V/D over supply method No supply Current capacity of VO power supply terminal Without I/O power supply terminal NX Unit power consumption Connected to a CPU Unit or Connected to a Communications Coupler Unit 1.45 W max. Connected to a Communications Coupler Unit 1.45 W max. VD current consumption No consumption No consumption Connected to a Communications Coupler Unit 1.45 W max. VD current consumption No consumption No consumption Connected to a Communications Up oner supply + (introduction to the tot to the tot to the tot tot tot tot tot tot tot tot tot to			0.500	, ,		
Conversion time 250 µs/point Dimensions 12 (W) × 100 (H) × 71 (D) isolation method Between the put and the NX bus: Power = Transformer, Signal = Digital isolator (no isolation between inputs) Insulation resistance 20 M3 min. between isolated circuits (at 100 VDC) Dielectric strength 100 VDC Solated circuits for 1 minute at a leakage current of 5 mÅ max. Vic power supply method No supply Corrected to a CPU Unit or Communication Control Unit 1.15 W max. Corrected to a Communications Control to consumption Without I/O power supply terminals Weight 70 g max. Connected to a CPU Unit or Communication Control Unit 1.15 W max. AG Arating eroust internal CND No consumption Circuit layout Installation orientation: Installation orientation: Installation orientation: Installation orientation: and restrictions: No restrictions Restrictions: No restrictions Restrictions: No restrictions Installation control Unit Possible in Quipti installation. Restrictions: No restrictions Terminal connection Installation orientation: Input tippet imput - b - Input - b - Input - Inp			overall			
Dimensions 12 (W) x 100 (H) x 71 (D) Isolation method Between the input and the NX bus: Power erransformer, Signal = Dipital solator (no isolation between inputs) Insulation resistance 20 M2 min. between isolated circuits (at 100 VDC) Delectric strength 510 VAC between isolated circuits or 1 minute at a leakage current of 5 mA max. VO power supply method No supply Current capacity of V/O power supply terminals Without I/O power supply terminals NX Unit power consumption - Connected to a CPU Unit or Connected to a Communications Coupler Unit 1.45 W max. VO current consumption No consumption Weight 70 g max. - Terminal consumption No consumption No consumption Circuit layout Installation orientation: (H) - Connected to a Communications Coupler Unit 1.550 KG \$510 KG \$510 KG \$510 KG \$510 KG \$510 KG \$510 KG \$00 power supply + (H) power supply - (H) No consumption Installation orientation: and restrictions - Connected to a CPU Unit or Communication Control Unit: Possible in upright installation. • Connected to a CPU Unit or Communication Control Unit: Possible in 0 pright installation. • Connected to a CPU Unit or Communication Control Unit: Possible in 0 pright installation. • Connected to a CPU Unit or Communication Control Unit: Possible in 0 pright installation. • Connected to a CPU Unit or Communication Control Unit: Possible in 0 prientations. Restrictions: No restrictions Terminal connection (lagram Installation orientation: Input + input						
Dimensions 12 (W) x 100 (H) x 71 (D) Isolation method - Transformer, Signal = Digital isolator (no isolation between isolated circuits (at 100 VDC) Insulation resistance 20 M2 min. between isolated circuits (at 100 VDC) Dielectric strength Sin VAC between isolated circuits (of 100 power supply method V0 power supply No supply Current capacity of V/O power supply terminals Without I/O power supply terminals NX Unit power complying the complexity of V/O power supply terminals VO current consumption No consumption NX Unit power complexity of V/O power supply terminals VO current consumption No consumption Circuit layout 70 g max. VO current consumption No consumption Installation orientation: 100 power supply terminal No consumption No consumption Installation orientation: 100 power supply terminals No consumption No consumption Installation orientation: 100 power supply terminal GND No power supply terminal GND No power supply terminal GND No power supply terminal 100 power supply terminal GND No power supply terminal GND No power supply terminal GND Installation orientation: 100 power supply terminal GND 100 power supply terminal GND No power supply terminal GND			Conversion time			
Installation resistance 100 VDC) Detection of the registrer of the max. VD ower supply No supply No supply Current capacity of UO power supply terminals NX Unit power consumption • Connected to a CPU Unit or Communications Coupler Unit 1.45 W max. • Connected to a CPU Unit or Communications Coupler Unit 1.15 W max. • Weight • 70 g max. • Weight • 70 g max. • No consumption • No consumption • No consumption • No consumption • Circuit layout • Termatize or supply • • • • • • • • • • • • • • • •	Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	= Transformer, Signal = Digital isolator (no		
method Initial (No supply) power supply terminal Windu NO power supply terminal NX Unit power consumption • Connected to a CPU Unit or Conneurication Control Unit 1.45 W max. // O current consumption No consumption No consumption Weight 70 g max. // O g max. // O g max. Circuit layout // Imput1 = to 8- (N) power supply + (Input1 = to 8- (N) power supply - (N) power s	Insulation resistance		•	minute at a leakage current of 5 mA max.		
NX Unit power consumption Communication Control Unit 1.45 W max. VO current consumption No consumption Weight 70 g max. Circuit layout Imput 1 to 8+ (nput 1 to 10+ (nput 1 t	I/O power supply method					
Circuit layout Input1+ to 8+ (Input1- to 8- (Input1- to 8- (Input	NX Unit power consumption	Communication Control Unit 1.45 W max. • Connected to a Communications Coupler Unit	I/O current consum	ption No consumption		
Circuit layout Imputit- to 8- (Inputit- to 8- (I	Weight	70 g max.				
Installation orientation and restrictions • 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 Voltage Input Unit NX-AD4604 A 1 Input + Input + Input - Input + Input - Input + Input - Input + Input - Input - B Input + Input - Input + Input - Input - Input - B	Circuit layout	Terminal block Input1– to 8– AG AG AG AG AG AG AG AG AG AG				
Terminal connection diagram NX-AD4604 Input1+ input2+ Input + Input3+ input4+ Input4+ Input5+ input6+ Input6+ Input7+ input8+ Input7- input8- B1 B1 Input disconnection Not supported	Installation orientation and restrictions	 Connected to a CPU Unit or Communication Control Unit: Possible in upright installation. Connected to a Communications Coupler Unit: Possible in 6 orientations. 				
	Terminal connection diagram	NX-AD4604 A1 Input1+ Input2+ Input1- Input3- Input4+ Input5+ Input5+ Input6+ Input7- Input8+ Input7- Input8+				
	Input disconnection detection	Not supported.				

Analog Input Unit (voltage input type) 8 points NX-AD4604

		Model			4000	
Unit name	Analog Input Unit (voltage input type)	External connection		NX-AD		
Number of points	8 points	terminals		termina	ess clamping terminal block (16 als)	
I/O refreshing method	Selectable Synchronous I/O refreshing or F		ng	D:"		
	TS indicator AD4608	Input method Input range		Differential Input		
	AD4608 TS			-10 to		
		Input conversion Absolute maxim	•	-5 to 1	05% (full scale)	
Indicator		rating	±15 V			
Indicator		Input impedance	ce	1 MΩ r	nin.	
		Resolution			0 (full scale)	
		Overall 25°C			(full scale)	
			55°C		(full scale)	
		Conversion tim	ne	10 μs/p		
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation metho		= Tran	en the input and the NX bus: Power sformer, Signal = Digital isolator (no in between inputs)	
Insulation resistance	20 $M\Omega$ min. between isolated circuits (at 100 VDC)	Dielectric stren	ngth		C between isolated circuits for 1 at a leakage current of 5 mA max.	
I/O power supply method	No supply	Current capacit power supply to		Withou	t I/O power supply terminals	
NX Unit power consumption	 Connected to a CPU Unit or Communication Control Unit 1.45 W max. Connected to a Communications Coupler Unit 1.15 W max. 	I/O current consumption		No consumption		
Weight	70 g max.	70 g max.				
Circuit layout	$\begin{array}{c c} Terminal block & Input1+ to 8+ \\ Input1- to 8- \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ $				connector	
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	Voltage Input Unit NX-AD4608 A1B1 Input1+ Input2+ Input1- Input2- Input3+ Input4+ Input3- Input4- Input5+ Input6+ Input5- Input6- Input7- Input8- A8B8					
Input disconnection detection	Not supported.					

Analog Input Unit (voltage input type) 8 points NX-AD4608

Unit name	Analog Input Unit (current input type)	Model	NX-AD2203		
Number of points	2 points	External connection terminals	Screwless clamping terminal block (8 terminals)		
I/O refreshing method	Free-Run refreshing				
	TS indicator	Input method	Single-ended input		
	AD2203	Input range	4 to 20 mA		
		Input conversion range	-5 to 105% (full scale)		
Indicator		Absolute maximum rating	±30 mA		
indicator		Input impedance	250 Ω min.		
		Resolution	1/8000 (full scale)		
		Overall 25°C	±0.2% (full scale)		
		accuracy 0 to 55°C	±0.4% (full scale)		
		Conversion time	250 μs/point		
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Between the input and the NX bus: Power = Transformer, Signal = Digital isolator (no isolation between inputs)		
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 1.25 W max. Connected to a Communications Coupler Unit 0.90 W max. 	I/O current consumption	No consumption		
Weight	70 g max.				
Circuit layout	Terminal block INV to 2+ IOG AG: Analog circuit internal GND NX bus connector (left) I/O power supply + 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 I OC IOV 24 VDC A8 B8	Current Input Unit NX-AD2203 Input + Input + 24 V (Sensor power supply +) 0 V (Sensor power supply – / Input –) Three-wire sensor NC NC AB The NC terminal is not connected to the internal circuit.			
Input disconnection detection	Supported.				

Analog Input Unit (current input type) 2 points NX-AD2203

• ·			I			
Unit name	Analog Input Unit (current input type)	Model	NX-AD2204			
Number of points	2 points	External connection terminals	Screwless clamping terminal block (8 terminals)			
I/O refreshing method	Free-Run refreshing					
	TS indicator	Input method	Differential Input			
	AD2204	Input range	4 to 20 mA			
		Input conversion range	-5 to 105% (full scale)			
Indicator		Absolute maximum rating	±30 mA			
		Input impedance	250 Ω min.			
		Resolution	1/8000 (full scale)			
		Overall 25°C accuracy 0 to 55°C	±0.2% (full scale)			
		Conversion time	±0.4% (full scale)			
		Conversion time	250 μs/point Between the input and the NX bus: Power			
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	= Transformer, Signal = Digital isolator (no isolation between inputs)			
Insulation resistance	20 $M\Omega$ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.			
I/O power supply method	No supply	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 1.25 W max. Connected to a Communications Coupler Unit 0.90 W max. 	I/O current consumption	No consumption			
Weight	70 g max.	70 g max.				
Circuit layout	Terminal block $\begin{bmatrix} Input1+ to 2+\\ Input1- to 2-\\ AG \\ KG \\ KO power supply +\\ (left) \end{bmatrix}$ $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	Current Input Unit NX-AD2204 A Input1+ Input2+ Input1- Input2- AG AG AG Input1- Input2-					
Input disconnection detection	Supported.					
	1					

Analog Input Unit (current input type) 2 points NX-AD2204

Unit name	Analog Input Unit (current input type)	Model		NX-AD2208	
		External co	onnection	Screwless clamping terminal block (8	
Number of points	2 points	terminals		terminals)	
I/O refreshing method	Selectable Synchronous I/O refreshing or Free-Run refreshing				
	TS indicator AD2208	Input method		Differential Input 4 to 20 mA	
		Input range	ersion range	-5 to 105% (full scale)	
		Absolute m	•		
		rating	luxinum	±30 mA	
Indicator		Input imped	dance	250 Ω	
		Resolution		1/30000 (full scale)	
		overail	25°C	±0.1% (full scale)	
		-	0 to 55°C	±0.2% (full scale)	
		Conversior	n time	10 µs/point	
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation m	ethod	Between the input and the NX bus: Power = Transformer, Signal = Digital isolator (no isolation between inputs)	
Insulation resistance	20 M Ω min. between isolated circuits (at 100 VDC)	Dielectric s		510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.	
I/O power supply method	No supply		pacity of I/O ply terminal	Without I/O power supply terminals	
NX Unit power consumption	 Connected to a CPU Unit or Communication Control Unit 1.25 W max. Connected to a Communications Coupler Unit 0.90 W max. 	I/O current consumption		No consumption	
Weight	70 g max.				
Circuit layout	$\begin{array}{c c} \text{Terminal block} & \text{Input1+ to 2+} \\ \text{Input1- to 2-} \\ \text{AG} \\ A$				
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	Current Input Unit NX-AD2208 Input + Input1+ Input2+ Input + Input1- Input2- Input - AG AG NC NC AG ts connected to 0 V of analog circuit inside the Unit. It is not necessary to wire AG terminal normally.				
Input disconnection detection	Supported.				

Analog Input Unit (current input type) 2 points NX-AD2208

Unit name	Analog Input Unit (current input type)	Model		NX-AD	3203
		External c	onnection		ess clamping terminal block (12
Number of points	4 points	terminals		termina	
I/O refreshing method	Free-Run refreshing				
	TS indicator	Input meth		•	ended input
	AD3203	Input rang		4 to 20	
		•	version range	-5 to 10	05% (full scale)
Indicator		Absolute r rating	naximum	±30 m/	4
Indicator		Input impe	edance	250 Ω	min.
		Resolution	1	1/8000	(full scale)
		Overall	25°C		(full scale)
		accuracy	0 to 55°C		(full scale)
		Conversio	n time	250 μs	
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation n	nethod	= Tran	en the input and the NX bus: Power sformer, Signal = Digital isolator (no n between inputs)
Insulation resistance	20 $M\Omega$ min. between isolated circuits (at 100 VDC)	Dielectric	strength		C between isolated circuits for 1 at a leakage current of 5 mA max.
I/O power supply method	Supply from the NX bus		pacity of I/O		1 A/terminal max., 1 A/terminal max.
NX Unit power consumption	 Connected to a CPU Unit or Communication Control Unit 1.25 W max. Connected to a Communications Coupler Unit 0.90 W max. 	I/O current	t consumption	No cor	sumption
Weight	70 g max.				
Circuit layout	Terminal block INX bus connector (left) I/O power supply + I/O power supply - NX bus connector (left) I/O power supply - NX bus connector (left) I/O power supply - NX bus connector (right)				connector
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 IOV IOV 24 VDC IOG IOG A8 B8	Current Input Unit NX-AD3203 A1 Input1+ Input2+ IOV IOV IOG IOG Input3+ Input4+ IOV IOV IOG IOG A8 B8			•
Input disconnection detection	Supported.				

Analog Input Unit (current input type) 4 points NX-AD3203

• .					
Unit name	Analog Input Unit (current input type)	Model	NX-AD3204		
Number of points	4 points	External connection terminals	Screwless clamping terminal block (12 terminals)		
I/O refreshing method	Free-Run refreshing				
	TS indicator	Input method	Differential Input		
	AD3204	Input range	4 to 20 mA		
		Input conversion range	-5 to 105% (full scale)		
Indicator		Absolute maximum rating	±30 mA		
		Input impedance	250 Ω min.		
		Resolution	1/8000 (full scale)		
		Overall 25°C accuracy 0 to 55°C	±0.2% (full scale)		
			±0.4% (full scale)		
		Conversion time	250 μs/point Between the input and the NX bus: Power		
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	= Transformer, Signal = Digital isolator (no isolation between inputs)		
Insulation resistance	20 $M\Omega$ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.		
I/O power supply method	No supply	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 1.25 W max. Connected to a Communications Coupler Unit 0.90 W max. 	I/O current consumption	No consumption		
Weight	70 g max.		•		
Circuit layout	$Terminal block \begin{bmatrix} Input1+ to 4+ \\ Input1- to 4- \\ AG \\ A$				
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	Current Input Unit NX-AD3204 A1B1 Input1+ Input2+ Input1- Input2- Input3+ Input4+ Input3- Input4- AG AG AG AG AG AG AG AG AG AG AG AG Input5+ Input4+ Input5+ Input6+ Input5+ Input6+ Input6+ Input5+ Input6+ I				
Input disconnection detection	Supported.				

Analog Input Unit (current input type) 4 points NX-AD3204

Unit name	Analog Input Unit (current input type)	Model	NX-AD3208		
Number of points	4 points	External connection terminals	Screwless clamping terminal block (12 terminals)		
I/O refreshing method	Selectable Synchronous I/O refreshing or Free-Run refreshing				
	TS indicator	Input method Input range	Differential Input		
	TIS		4 to 20 mA		
		Input conversion range Absolute maximum	-5 to 105% (full scale)		
Indicator		rating	±30 mA		
indicator		Input impedance	250 Ω min.		
		Resolution	1/30000 (full scale)		
		Overall 25°C accuracy 0 to 55°C	±0.1% (full scale)		
		Conversion time	±0.2% (full scale) 10 μs/point		
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Between the input and the NX bus: Power		
Dimensions			= Transformer, Signal = Digital isolator (no isolation between inputs)		
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	No supply	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. 	I/O current consumption	No consumption		
Weight	70 g max.				
Circuit layout	Terminal block Input1+ to 4+	510 KΩ \$510 KΩ AG: Analinter	og circuit nal GND I/O power supply + NX bus connector 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	Current Input Unit NX-AD3208 B1 Input1 + Input2+ Input + Input3- Input4+ Input3- Input4- Input4- AG AG AG AG AG AG Imput3- Input4- Input4- Imput3- Input4- Input4- Imput3- Input4- Input4- Imput3- Input4- Imput4- Imput3- Imput4- Imput4-				
Input disconnection detection	Supported.				

Analog Input Unit (current input type) 4 points NX-AD3208

Unit name	Analog Input Unit (current input type)	Model	NX-AD4203		
		External connection	Screwless clamping terminal block (16		
Number of points	8 points	terminals	terminals)		
I/O refreshing method	Free-Run refreshing				
Indicator	TS indicator AD4203 TS	Input method	Single-ended input		
		Input range	4 to 20 mA		
		Input conversion range Absolute maximum	-5 to 105% (full scale)		
		rating	±30 mA		
		Input impedance	85 Ω		
		Resolution	1/8000 (full scale)		
		Overall 25°C	±0.2% (full scale)		
		accuracy 0 to 55°C	±0.4% (full scale)		
		Conversion time	250 μs/point		
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Between the input and the NX bus: Power = Transformer, Signal = Digital isolator (no isolation between inputs)		
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.		
NX Unit power consumption	 Connected to a CPU Unit or Communication Control Unit 1.40 W max. Connected to a Communications Coupler Unit 1.05 W max. 	I/O current consumption	No consumption		
Weight	70 g max.				
Circuit layout	Terminal block IOV Terminal block Input1+ to 8+ NX bus connector (left) I/O power supply +	AMP AG: Analog circuit inter	nal GND 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 0 41 0 0 0 0 0 0 0 0 0 0 0 0 0	it NX-AD4203 B1 A1 B1 Input1+ Input2+ IOV IOV Input3+ Input4+ Input4+	Input + 24 V (Sensor power supply +) 0 V (Sensor power supply – / Input –) ee-wire Sensor		
Input disconnection detection	Supported.				

Analog Input Unit (current input type) 8 points NX-AD4203

Unit name	Analog Input Unit (current input type)	Model	NX-AD4204		
Number of points	8 points	External connection terminals	Screwless clamping terminal block (16 terminals)		
I/O refreshing method	Free-Run refreshing				
	TS indicator AD4203	Input method	Differential Input		
	AD4203 TS	Input range	4 to 20 mA		
		Input conversion range	-5 to 105% (full scale)		
Indicator		Absolute maximum rating	±30 mA		
indicator		Input impedance	85 Ω		
		Resolution	1/8000 (full scale)		
		Overall 25°C	$\pm 0.2\%$ (full scale)		
		accuracy 0 to 55°C	±0.4% (full scale)		
		Conversion time	250 µs/point		
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Between the input and the NX bus: Power = Transformer, Signal = Digital isolator (no isolation between inputs)		
Insulation resistance	20 $M\Omega$ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.		
I/O power supply method	No supply	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 1.40 W max. Connected to a Communications Coupler Unit 1.05 W max. 	I/O current consumption	No consumption		
Weight	70 g max.				
Circuit layout	Terminal block Input1+ to 8+ Input1- to 8- NX bus connector (left) I/O power supply + I/O power supply -		alog circuit ernal GND 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	Current Input Unit NX-AD4204 A1 B1 Input + Input1+ Input2+ Input3+ Input4+ Input3- Input4- Input5- Input6- Input7+ Input8+ Input7- Input8- A8 B8				
Input disconnection detection	Supported.				

Analog Input Unit (current input type) 8 points NX-AD4204

		N				
Unit name	Analog Input Unit (current input type)	Model	NX-AD4208			
Number of points	8 points	External connection terminals	Screwless clamping terminal block (16 terminals)			
I/O refreshing method		Selectable Synchronous I/O refreshing or Free-Run refreshing				
	TS indicator	Input method	Differential Input			
	AD4208 ■TS	Input range	4 to 20 mA			
		Input conversion range Absolute maximum	-5 to 105% (full scale)			
Indicator		rating	±30 mA			
		Input impedance	85 Ω			
		Resolution Overall 25°C	1/30000 (full scale) ±0.1% (full scale)			
		Overall 25°C accuracy 0 to 55°C	$\pm 0.2\%$ (full scale)			
		Conversion time	$10 \mu\text{s/point}$			
Dimensions	12 (W) x 100 (H) x 71 (D)	Isolation method	Between the input and the NX bus: Power = Transformer, Signal = Digital isolator (no isolation between inputs)			
Insulation resistance	20 $M\Omega$ min. between isolated circuits (at 100 VDC)	Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.			
I/O power supply method	No supply	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 1.45 W max. Connected to a Communications Coupler Unit 1.10 W max. 	I/O current consumption	No consumption			
Weight	70 g max.					
Circuit layout	Terminal block Input1+ to 8+ Terminal block Input1- to 8- NX bus connector (left) I/O power supply + I/O power supply -	S10 KΩ \$ 510 KΩ AG: Analo AG: Analo interr	I/O power supply + NX bus connector 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		nput + nput –				
Input disconnection detection	Supported.					

Analog Input Unit (current input type) 8 points NX-AD4208