OMRON

CS I/O Terminal Block Conversion Adapters · Conversion Cables

CJ1W-AT6□□/CJ1W-CM2□□-□□

From CS to NJ/NX:
Easy reliable replacement using existing terminal block wiring

CJ1W-AT601/AT602/AT611/AT612

CJ1W-AT641/AT681/AT682

Features

- No re-wiring and wiring checks necessary
- Easy three-step terminal block replacement lets you slash workload
- Wide range of supported I/O units

Ordering Information

Terminal Block Conversion Adapters/Terminal Block Conversion Cables

Product name		Specifications	Model	Standards ∗1
CS-series I/O Terminal Block Conversion Adapters		For Relay output, 8 points	**CJ1W-AT601**	EU Directives, RCM, UKCA
		For Triac output, 8 points	**CJ1W-AT602**	
		For Relay output, 16 points For DC input, 16 points	**CJ1W-AT611**	
		For Transistor output, 16 points	**CJ1W-AT612**	
		For Analog output, 4 points	**CJ1W-AT641**	
		For Analog input, 4 points/8 points	**CJ1W-AT681**	
		For Analog output, 8 points	**CJ1W-AT682**	
CS-series I/O Terminal Block Conversion Cables (Coming soon)		For High-speed counter unit, 2 channels	**CJ1W-CM211-CT**	---
		For High-speed counter unit, 4 channels	**CJ1W-CM212-CT**	
		For Position control unit	**CJ1W-CM213-NC**	

∗1. Refer to the OMRON website (www.ia.omron.com) or ask your OMRON representative for the most recent applicable standards for each model.

Optional Products

Product name	Specifications	Model
Reinforcement Bracket	Vibration and Shock Reinforcement Bracket for CJ1W-AT6□□ (Up to 3 terminal block conversion adapters can be used per bracket) Use this product when using the CJ series with a terminal block conversion adapter in an environment that is subject to continuous vibration or shock.	**CJ1W-ATT13**

Connection of I/O Units and Terminal Block Conversion Adapter/Terminal Block Conversion Cable

Supported Models

Terminal Block Conversion Adapters

Replacement product		Replaced from: CS-series ✻1		Replaced to: CJ-series ✻1		Replaced to: NX-series		Terminal Block Conversion Adapters
Product name	Number of points	Specifications	Model	Specifications	Model	Specifications	Model	Model
Relay Output Unit	8 points	250 VAC 2 A, 24 VDC 2 A, 120 VDC 0.1 A	CS1W-OC201	250 VAC 2 A, 24 VDC 2 A	CJ1W-OC201	---		CJ1W-AT601
	16 points		CS1W-OC211		CJ1W-OC211	---		CJ1W-AT611 ✻2
Triac Output Unit	8 points	250 VAC 1.2 A	CS1W-OA201	250 VAC 0.6 A	CJ1W-OA201 ✻3	---		CJ1W-AT602
					CJ1W-OA201-1			
Transistor Output Unit	16 points	12 to 24 VDC 0.5 A Sinking	CS1W-OD211	12 to 24 VDC 0.5 A Sinking	CJ1W-OD211	12 to 24 VDC 0.5 A Sinking	NX-OD5121-1	CJ1W-AT612 ✻2
		24 VDC 0.5 A Sourcing	CS1W-OD212	24 VDC 0.5 A Sourcing	CJ1W-OD212	24 VDC 0.5 A Sourcing	NX-OD5256-1	
Analog Output Unit	4 points	1 to 5 V, 0 to 5 V, 0 to 10 V, -10 to +10 V, 4 to 20 mA	CS1W-DA041	1 to 5 V, 0 to 5 V, 0 to 10 V, -10 to +10 V, 4 to 20 mA	CJ1W-DA041	---		CJ1W-AT641
	8 points	1 to 5 V, 0 to 5 V, 0 to 10 V, -10 to +10 V	CS1W-DA08V	1 to 5 V, 0 to 5 V, 0 to 10 V, -10 to +10 V	CJ1W-DA08V	---		CJ1W-AT682
		4 to 20 mA	CS1W-DA08C	4 to 20 mA	CJ1W-DA08C	---		
AC Input Unit	16 points	100 to 120 VAC 100 VAC: 10 mA 100 to120 VDC 100 VDC: 1.5 mA	CS1W-IA111	100 to 120 VAC 7 mA	CJ1W-IA111	---		CJ1W-AT611 ✻2
DC Input Unit	16 points	24 VDC 7 mA	CS1W-ID211	24 VDC 7 mA	CJ1W-ID211	24 VDC 7 mA	NX-ID5142-1	
Analog Input Unit	4 points	1 to 5 V, 0 to 5 V, 0 to 10 V, -10 to +10 V, 4 to 20 mA	CS1W-AD041-V1	1 to 5 V, 0 to 5 V, 0 to 10 V, -10 to +10 V, 4 to 20 mA	CJ1W-AD041-V1	---		CJ1W-AT681
	8 points		CS1W-AD081-V1		CJ1W-AD081-V1	---		
Interrupt Input Unit	16 points	24 VDC 7 mA	CS1W-INT01	24 VDC 7 mA	CJ1W-INT01	24 VDC 7 mA	NX-ID5142-1	CJ1W-AT611 ✻2
Quick-response Input Unit	16 points	24 VDC 7 mA	CS1W-IDP01	24 VDC 7 mA	CJ1W-IDP01	24 VDC 7 mA	NX-ID5142-1	

Terminal Block Conversion Cables

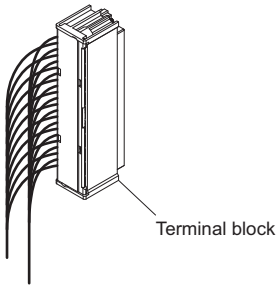
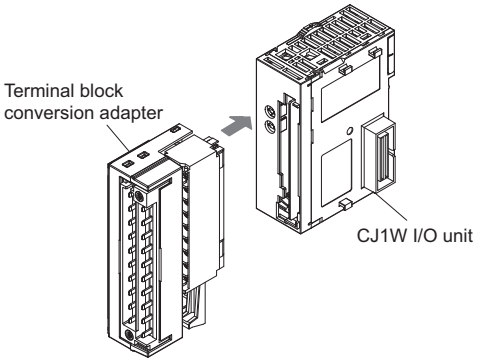
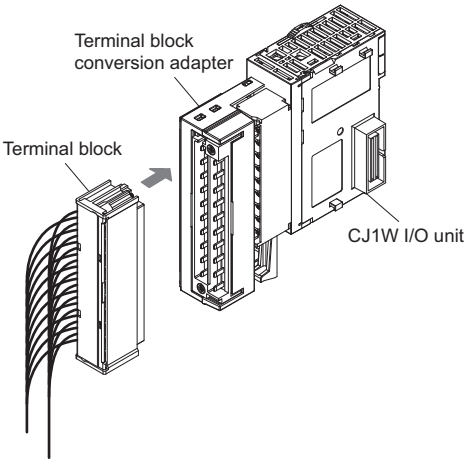
Replacement product		Replaced from: CS-series		Replaced to: CJ-series ✻1		Terminal Block Conversion Cables
Product name	Specifications	Specifications	Model	Specifications	Model	Model
High-speed Counter Unit		2 channels	CS1W-CT021	2 channels	CJ1W-CT021	CJ1W-CM211-CT
		4 channels	CS1W-CT041	2 channels × 2 units	CJ1W-CT021 × 2 units	CJ1W-CM212-CT
Position Control Unit	Position Control Unit, Open-loop control by pulse train output/ Open-collector output	1 axis	CS1W-NC113	1 axis	CJ1W-NC113	CJ1W-CM213-NC
		2 axes	CS1W-NC213	2 axes	CJ1W-NC213	
		4 axes	CS1W-NC413	4 axes	CJ1W-NC413	
	Position Control Unit, Open-loop control by pulse train output/ Line-driver output	1 axis	CS1W-NC133	1 axis	CJ1W-NC133	
		2 axes	CS1W-NC233	2 axes	CJ1W-NC233	
		4 axes	CS1W-NC433	4 axes	CJ1W-NC433	

✻1. The original product and the replacement product may functionally correspond but may have different detailed specifications. Please refer to the replacement guide and related manuals.

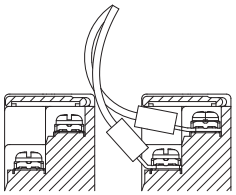
✻2. CS1W I/O unit is divided into 8 points × 2 commons, whereas CJ1W I/O unit is 16 points × 1 common. When replacing using a terminal block conversion unit, please ensure that the common power supply and common polarity are used.

✻3. CJ1W-OA201 is not UC1 cULus (Class I Division 2 hazardous location certification). If cULus (Class I Div 2 hazardous location certification) is required, use CJ1W-OA201-1.

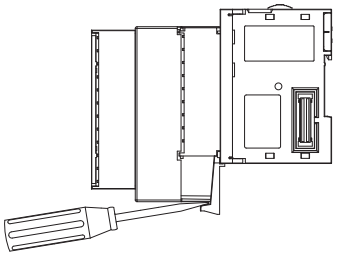
Installation Procedure of Terminal Block Conversion Adapter

Step	Procedure	Drawing
1	Remove the terminal block from the existing CS1W I/O unit.	
2	Lock the Terminal Block Conversion Adapter to the CJ1W I/O Unit.	
3	Attach the terminal block that you removed in step 1 to the Terminal Block Conversion Adapter. Check the terminal block and wiring now to make sure that there are no problems. • No loose screws. • No points where a cable is starting to break. • No rust or corrosion. • No terminal block damage. • The terminal block is fully inserted and secured.	

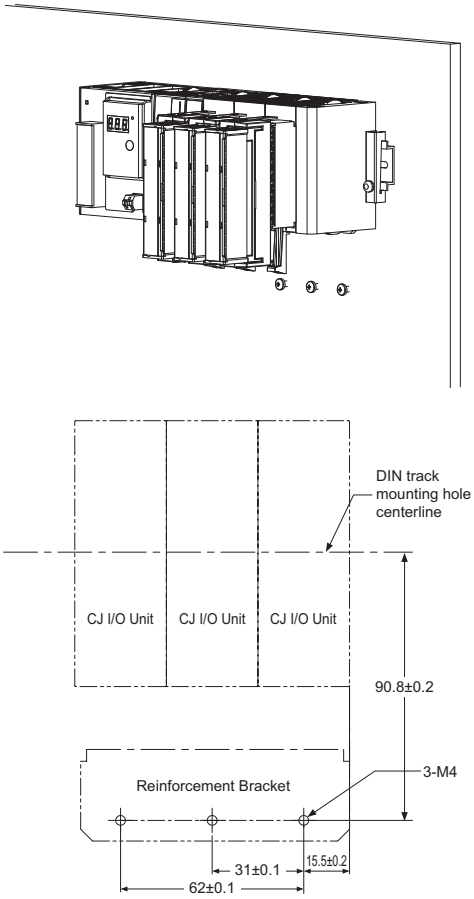
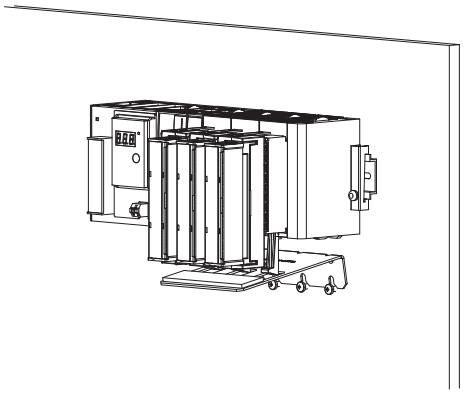
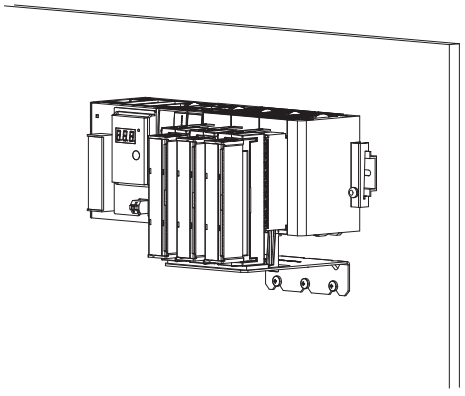
Note: 1. A CJ1W I/O Unit is 4 mm narrower than a CS1W I/O Unit.
Wiring will be easier if you bend the crimp terminals and cables as shown below when you attach the Terminal Block Conversion Adapter to the CJ1W I/O Unit.



Note: 2. Use a flat-blade screwdriver or similar tool to pull down and release the lock on the terminal block.



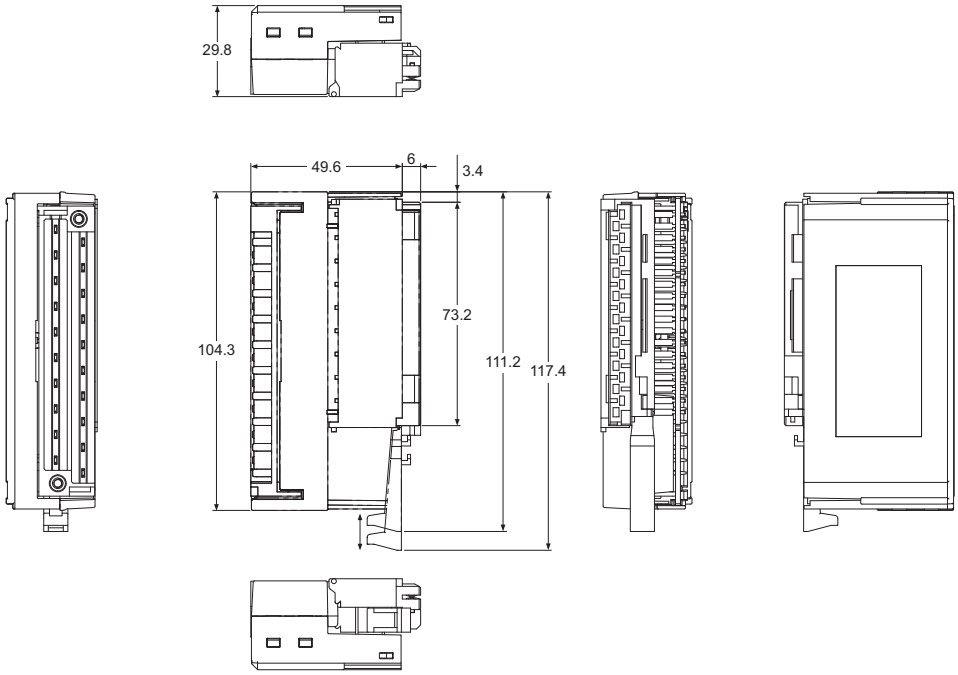
Installation Procedure of Reinforcement Bracket

Step	Procedure	Drawing
1	Drill three M4 holes in the mounting section and temporarily fasten the screws.	
2	Insert the reinforcement bracket by hooking it onto the screws.	
3	Tighten the screws to secure them.	

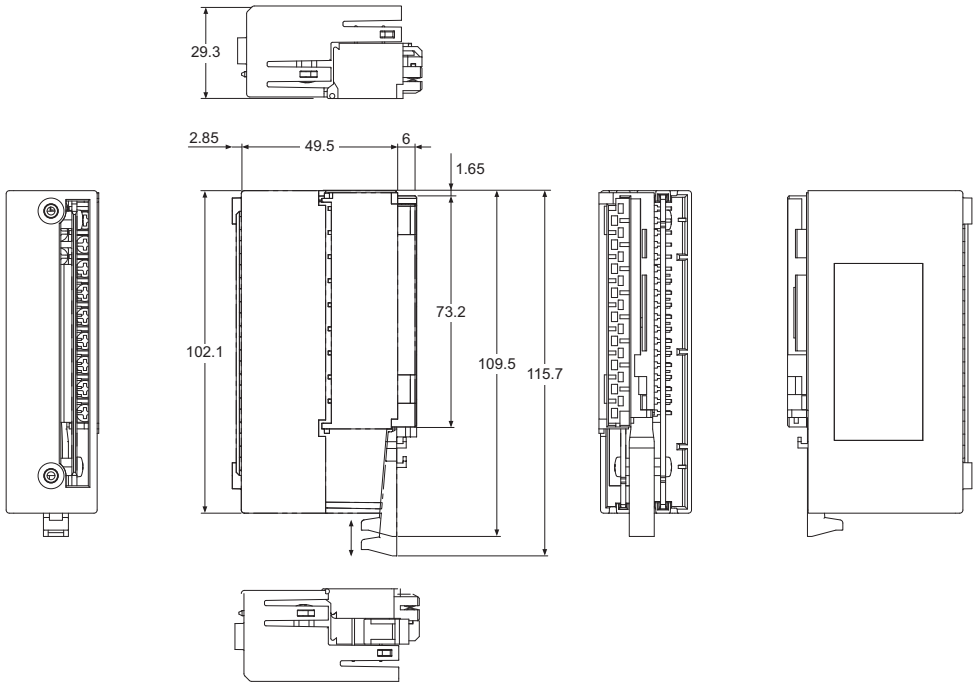
Dimensions

(Unit: mm)

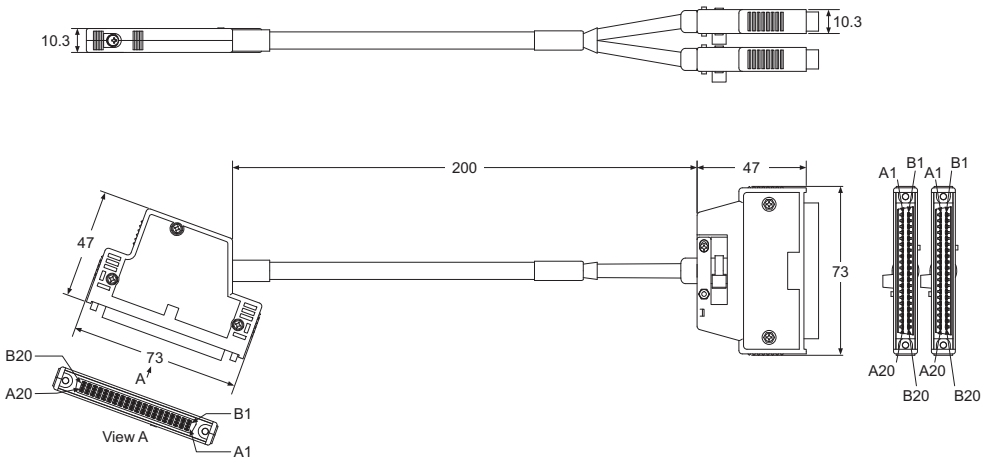
CJ1W-AT601
CJ1W-AT602
CJ1W-AT611
CJ1W-AT612



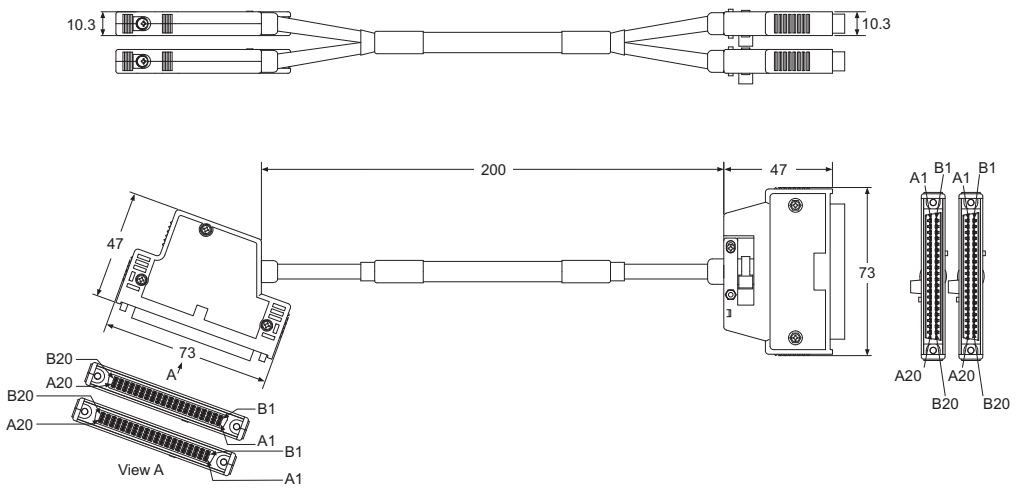
CJ1W-AT641
CJ1W-AT681
CJ1W-AT682



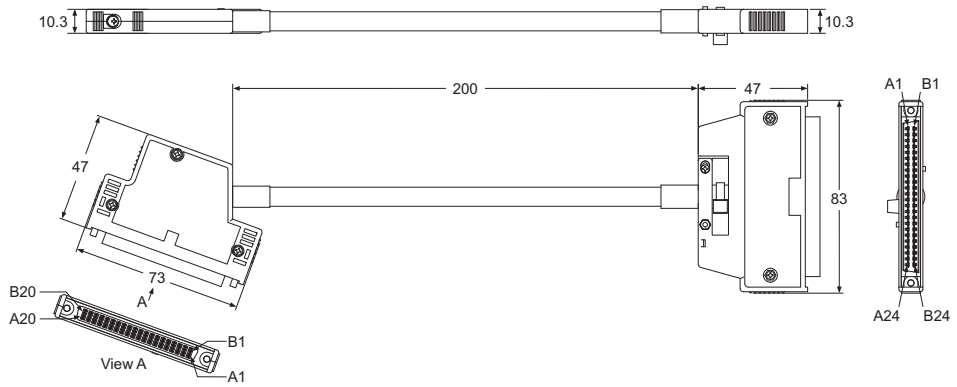
CJ1W-CM211-CT



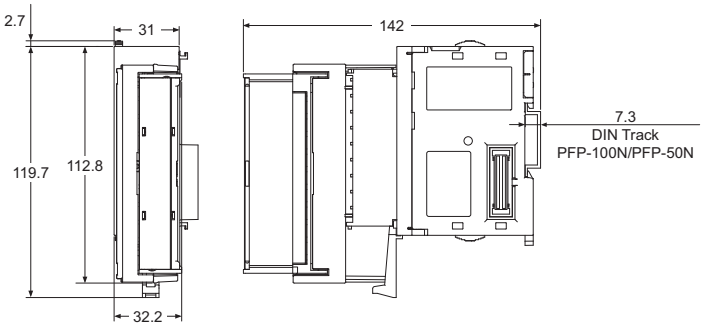
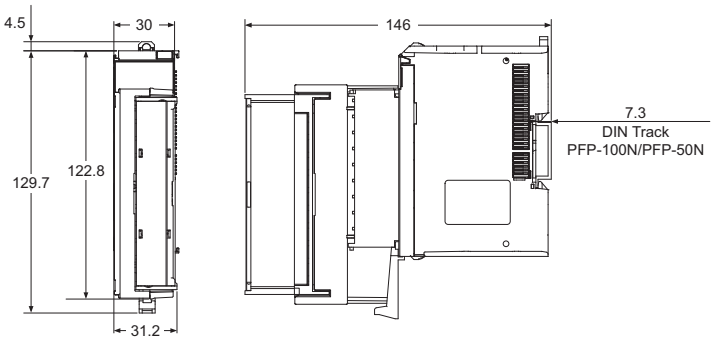
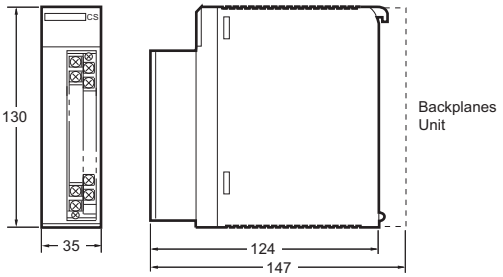
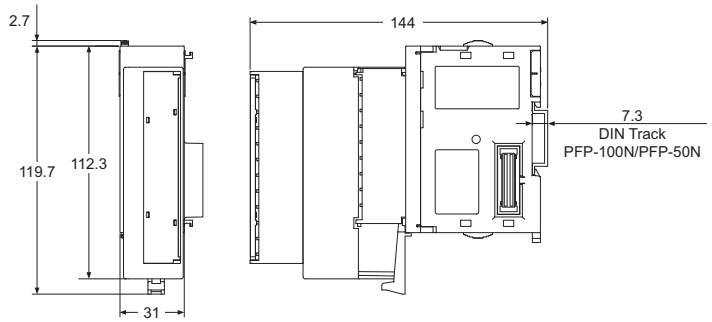
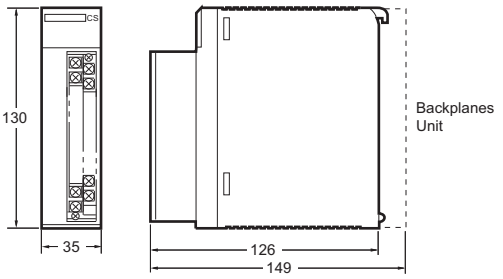
CJ1W-CM212-CT



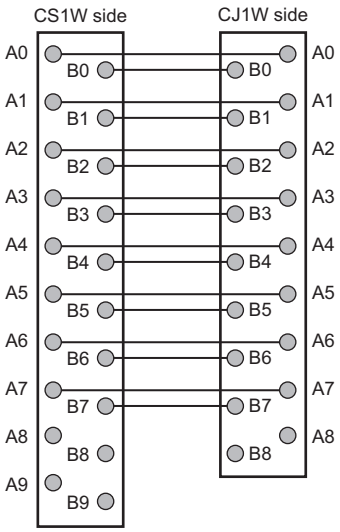
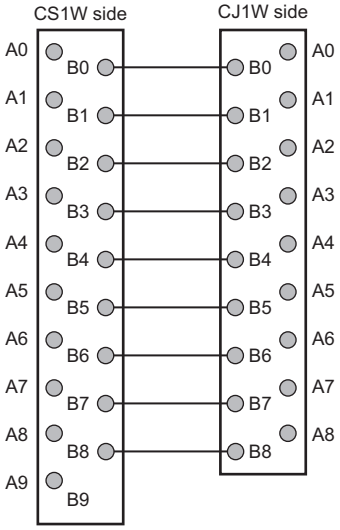
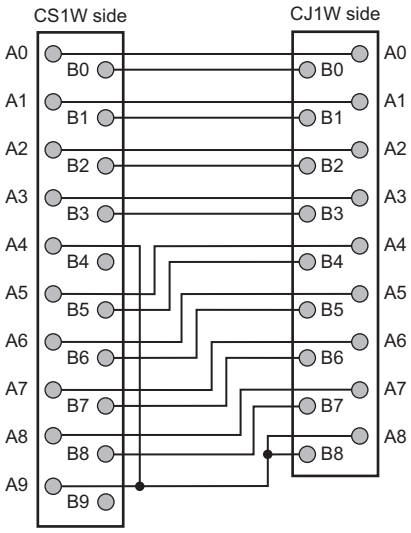
CJ1W-CM213-NC

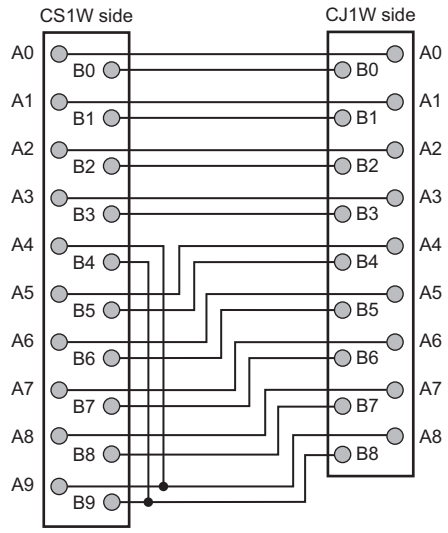
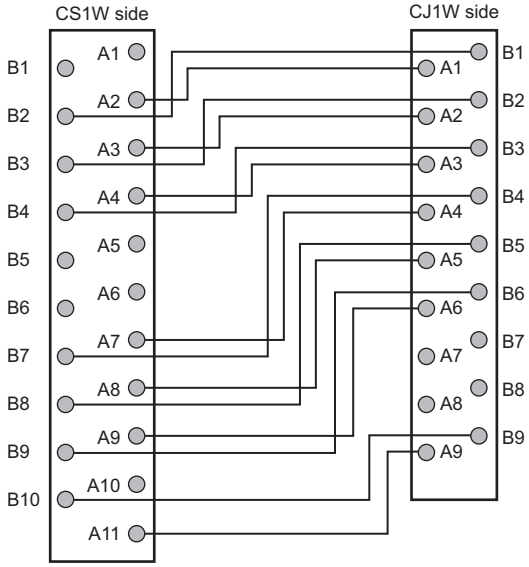
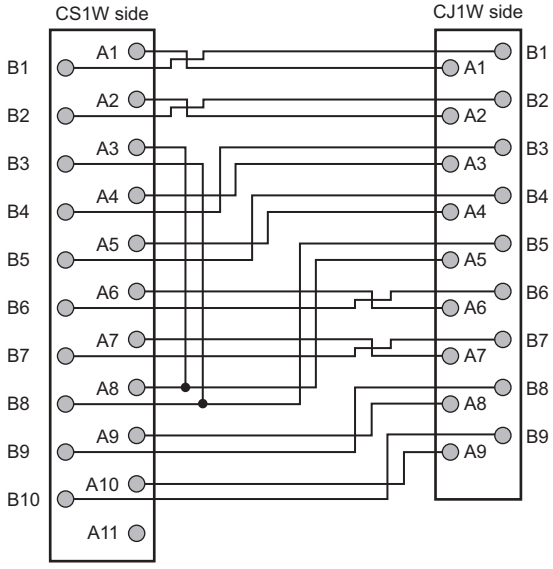


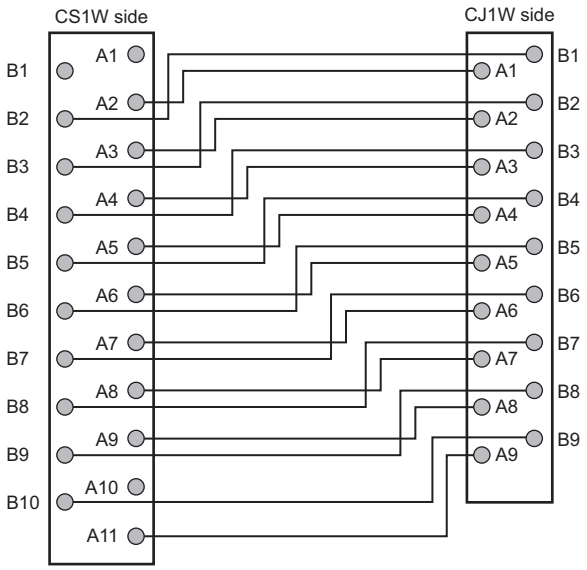
Dimensional Difference List

Replace to	Replace from
CJ1W-AT601/AT602/AT611/AT612 **CJ-series I/O Unit + Terminal Block Conversion Adapter + DIN Track**  **NX-series I/O Unit + Terminal Block Conversion Adapter + DIN Track**  	**CS-series I/O Unit + Backplanes Unit** 
CJ1W-AT641/AT681/AT682 **CJ-series I/O Unit + Terminal Block Conversion Adapter + DIN Track**  	**CS-series I/O Unit + Backplanes Unit** 

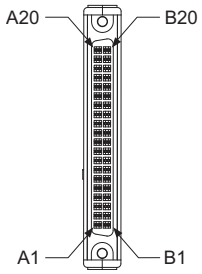
Internal Wiring Diagram

Terminal Block Conversion Adapter	Pin assugnment and internal wiring
CJ1W-AT601	
CJ1W-AT602	
CJ1W-AT611	

Terminal Block Conversion Adapter	Pin assugnment and internal wiring
CJ1W-AT612	
CJ1W-AT641	
CJ1W-AT681	

Terminal Block Conversion Adapter	Pin assugnment and internal wiring
CJ1W-AT682	

Terminal Block Conversion Cable	Pin assugnment and internal wiring
CJ1W-CM211-CT	**CJ1W-CT021 side**

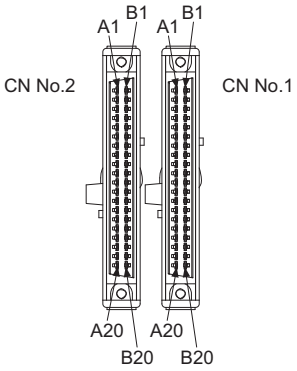


Pin No.	Designation	Pin No.	Designation
A20	Counter 2 Input Z: 12 VDC	B20	Counter 2 Input Z: 24 VDC
A19	Counter 2 Input Z: Line Driver -/0 V	B19	Counter 2 Input Z: Line Driver +
A18	Counter 2 Input B: 12 VDC	B18	Counter 2 Input B: 24 VDC
A17	Counter 2 Input B: Line Driver -/0 V	B17	Counter 2 Input B: Line Driver +
A16	Counter 2 Input A: 12 VDC	B16	Counter 2 Input A: 24 VDC
A15	Counter 2 Input A: Line Driver -/0 V	B15	Counter 2 Input A: Line Driver +
A14	Not used	B14	Not used
A13	Counter 1 Input Z: 5 VDC	B13	Counter 1 Input Z: 24 VDC
A12	Counter 1 Input Z: Line Driver -/0 V	B12	Counter 1 Input Z: Line Driver +
A11	Counter 1 Input B: 5 VDC	B11	Counter 1 Input B: 24 VDC
A10	Counter 1 Input B: Line Driver -/0 V	B10	Counter 1 Input B: Line Driver +
A9	Counter 1 Input A: 5 VDC	B9	Counter 1 Input A: 24 VDC
A8	Counter 1 Input A: Line Driver -/0 V	B8	Counter 1 Input A: Line Driver +
A7	Not used	B7	Not used
A6	External Control Input 1: COM	B6	External Control Input 1: 24 VDC
A5	External Control Input 0: COM	B5	External Control Input 0: 24 VDC
A4	Not used	B4	Not used
A3	External Output 1 (NPN)	B3	External Output 1 (PNP)
A2	External Output 0 (NPN)	B2	External Output 0 (PNP)
A1	External Output COM: 0 V	B1	External output power supply: 12 to 24 VDC

Terminal Block Conversion Cable	Pin assugnment and internal wiring

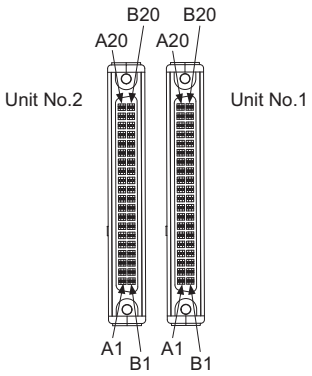
CJ1W-CM211-CT

CS1W-CT021 side



CN No.2				CN No.1			
Pin No.	Designation	Pin No.	Designation	Pin No.	Designation	Pin No.	Designation
A1	External Output COM: 0 V	B1	External output power supply: 12 to 24 VDC	A1	External Output COM: 0 V	B1	External output power supply: 12 to 24 VDC
A2	External Output 2 (NPN)	B2	External Output 2 (PNP)	A2	External Output 0 (NPN)	B2	External Output 0 (PNP)
A3	External Output 3 (NPN)	B3	External Output 3 (PNP)	A3	External Output 1 (NPN)	B3	External Output 1 (PNP)
A4	Not used	B4	Not used	A4	Not used	B4	Not used
A5	External Control Input 2: COM	B5	External Control Input 2: 24 VDC	A5	External Control Input 0: COM	B5	External Control Input 0: 24 VDC
A6	External Control Input 3: COM	B6	External Control Input 3: 24 VDC	A6	External Control Input 1: COM	B6	External Control Input 1: 24 VDC
A7	Not used	B7	Not used	A7	Not used	B7	Not used
A8	Counter 2 Input A: Line Driver -/0 V	B8	Counter 2 Input A: Line Driver +	A8	Counter 1 Input A: Line Driver -/0 V	B8	Counter 1 Input A: Line Driver +
A9	Counter 2 Input A: 12 VDC	B9	Counter 2 Input A: 24 VDC	A9	Counter 1 Input A: 5 VDC	B9	Counter 1 Input A: 24 VDC
A10	Counter 2 Input B: Line Driver -/0 V	B10	Counter 2 Input B: Line Driver +	A10	Counter 1 Input B: Line Driver -/0 V	B10	Counter 1 Input B: Line Driver +
A11	Counter 2 Input B: 12 VDC	B11	Counter 2 Input B: 24 VDC	A11	Counter 1 Input B: 5 VDC	B11	Counter 1 Input B: 24 VDC
A12	Counter 2 Input Z: Line Driver -/0 V	B12	Counter 2 Input Z: Line Driver +	A12	Counter 1 Input Z: Line Driver -/0 V	B12	Counter 1 Input Z: Line Driver +
A13	Counter 2 Input Z: 12 VDC	B13	Counter 2 Input Z: 24 VDC	A13	Counter 1 Input Z: 5 VDC	B13	Counter 1 Input Z: 24 VDC
A14	Not used	B14	Not used	A14	Not used	B14	Not used

Terminal Block Conversion Cable	Pin assugnment and internal wiring
CJ1W-CM212-CT	**CJ1W-CT021 side**

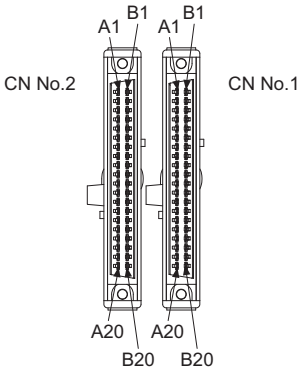


Unit No.2				Unit No.1			
Pin No.	**Designation**	**Pin No.**	**Designation**	**Pin No.**	**Designation**	**Pin No.**	**Designation**
A20	Counter 4 Input Z: 12 VDC	B20	Counter 4 Input Z: 24 VDC	A20	Counter 2 Input Z: 12 VDC	B20	Counter 2 Input Z: 24 VDC
A19	Counter 4 Input Z: Line Driver -/0 V	B19	Counter 4 Input Z: Line Driver +	A19	Counter 2 Input Z: Line Driver -/0 V	B19	Counter 2 Input Z: Line Driver +
A18	Counter 4 Input B: 12 VDC	B18	Counter 4 Input B: 24 VDC	A18	Counter 2 Input B: 12 VDC	B18	Counter 2 Input B: 24 VDC
A17	Counter 4 Input B: Line Driver -/0 V	B17	Counter 4 Input B: Line Driver +	A17	Counter 2 Input B: Line Driver -/0 V	B17	Counter 2 Input B: Line Driver +
A16	Counter 4 Input A: 12 VDC	B16	Counter 4 Input A: 24 VDC	A16	Counter 2 Input A: 12 VDC	B16	Counter 2 Input A: 24 VDC
A15	Counter 4 Input A: Line Driver -/0 V	B15	Counter 4 Input A: Line Driver +	A15	Counter 2 Input A: Line Driver -/0 V	B15	Counter 2 Input A: Line Driver +
A14	Not used	B14	Not used	A14	Not used	B14	Not used
A13	Counter 3 Input Z: 5 VDC	B13	Counter 3 Input Z: 24 VDC	A13	Counter 1 Input Z: 5 VDC	B13	Counter 1 Input Z: 24 VDC
A12	Counter 3 Input Z: Line Driver -/0 V	B12	Counter 3 Input Z: Line Driver +	A12	Counter 1 Input Z: Line Driver -/0 V	B12	Counter 1 Input Z: Line Driver +
A11	Counter 3 Input B: 5 VDC	B11	Counter 3 Input B: 24 VDC	A11	Counter 1 Input B: 5 VDC	B11	Counter 1 Input B: 24 VDC
A10	Counter 3 Input B: Line Driver -/0 V	B10	Counter 3 Input B: Line Driver +	A10	Counter 1 Input B: Line Driver -/0 V	B10	Counter 1 Input B: Line Driver +
A9	Counter 3 Input A: 5 VDC	B9	Counter 3 Input A: 24 VDC	A9	Counter 1 Input A: 5 VDC	B9	Counter 1 Input A: 24 VDC
A8	Counter 3 Input A: Line Driver -/0 V	B8	Counter 3 Input A: Line Driver +	A8	Counter 1 Input A: Line Driver -/0 V	B8	Counter 1 Input A: Line Driver +
A7	Not used	B7	Not used	A7	Not used	B7	Not used
A6	External Control Input 3: COM	B6	External Control Input 3: 24 VDC	A6	External Control Input 1: COM	B6	External Control Input 1: 24 VDC
A5	External Control Input 2: COM	B5	External Control Input 2: 24 VDC	A5	External Control Input 0: COM	B5	External Control Input 0: 24 VDC
A4	Not used	B4	Not used	A4	Not used	B4	Not used
A3	External Output 3 (NPN)	B3	External Output 3 (PNP)	A3	External Output 1 (NPN)	B3	External Output 1 (PNP)
A2	External Output 2 (NPN)	B2	External Output 2 (PNP)	A2	External Output 0 (NPN)	B2	External Output 0 (PNP)
A1	External Output COM: 0 V	B1	External output power supply: 12 to 24 VDC	A1	External Output COM: 0 V	B1	External output power supply: 12 to 24 VDC

Terminal Block Conversion Cable	Pin assugnment and internal wiring

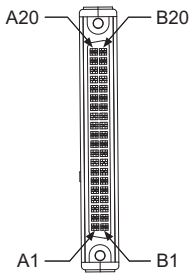
CJ1W-CM212-CT

CS1W-CT041 side



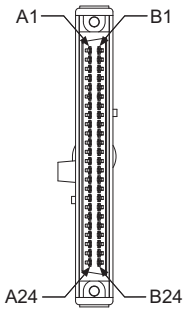
CN No.2				CN No.1			
Pin No.	Designation	Pin No.	Designation	Pin No.	Designation	Pin No.	Designation
A1	External Output COM: 0 V	B1	External output power supply: 12 to 24 VDC	A1	External Output COM: 0 V	B1	External output power supply: 12 to 24 VDC
A2	External Output 2 (NPN)	B2	External Output 2 (PNP)	A2	External Output 0 (NPN)	B2	External Output 0 (PNP)
A3	External Output 3 (NPN)	B3	External Output 3 (PNP)	A3	External Output 1 (NPN)	B3	External Output 1 (PNP)
A4	Not used	B4	Not used	A4	Not used	B4	Not used
A5	External Control Input 2: COM	B5	External Control Input 2: 24 VDC	A5	External Control Input 0: COM	B5	External Control Input 0: 24 VDC
A6	External Control Input 3: COM	B6	External Control Input 3: 24 VDC	A6	External Control Input 1: COM	B6	External Control Input 1: 24 VDC
A7	Not used	B7	Not used	A7	Not used	B7	Not used
A8	Counter 2 Input A: Line Driver -/0 V	B8	Counter 2 Input A: Line Driver +	A8	Counter 1 Input A: Line Driver -/0 V	B8	Counter 1 Input A: Line Driver +
A9	Counter 2 Input A: 12 VDC	B9	Counter 2 Input A: 24 VDC	A9	Counter 1 Input A: 5 VDC	B9	Counter 1 Input A: 24 VDC
A10	Counter 2 Input B: Line Driver -/0 V	B10	Counter 2 Input B: Line Driver +	A10	Counter 1 Input B: Line Driver -/0 V	B10	Counter 1 Input B: Line Driver +
A11	Counter 2 Input B: 12 VDC	B11	Counter 2 Input B: 24 VDC	A11	Counter 1 Input B: 5 VDC	B11	Counter 1 Input B: 24 VDC
A12	Counter 2 Input Z: Line Driver -/0 V	B12	Counter 2 Input Z: Line Driver +	A12	Counter 1 Input Z: Line Driver -/0 V	B12	Counter 1 Input Z: Line Driver +
A13	Counter 2 Input Z: 12 VDC	B13	Counter 2 Input Z: 24 VDC	A13	Counter 1 Input Z: 5 VDC	B13	Counter 1 Input Z: 24 VDC
A14	Not used	B14	Not used	A14	Not used	B14	Not used
A15	Counter 4 Input A: Line Driver -/0 V	B15	Counter 4 Input A: Line Driver +	A15	Counter 3 Input A: Line Driver -/0 V	B15	Counter 3 Input A: Line Driver +
A16	Counter 4 Input A: 12 VDC	B16	Counter 4 Input A: 24 VDC	A16	Counter 3 Input A: 5 VDC	B16	Counter 3 Input A: 24 VDC
A17	Counter 4 Input B: Line Driver -/0 V	B17	Counter 4 Input B: Line Driver +	A17	Counter 3 Input B: Line Driver -/0 V	B17	Counter 3 Input B: Line Driver +
A18	Counter 4 Input B: 12 VDC	B18	Counter 4 Input B: 24 VDC	A18	Counter 3 Input B: 5 VDC	B18	Counter 3 Input B: 24 VDC
A19	Counter 4 Input Z: Line Driver -/0 V	B19	Counter 4 Input Z: Line Driver +	A19	Counter 3 Input Z: Line Driver -/0 V	B19	Counter 3 Input Z: Line Driver +
A20	Counter 4 Input Z: 12 VDC	B20	Counter 4 Input Z: 24 VDC	A20	Counter 3 Input Z: 5 VDC	B20	Counter 3 Input Z: 24 VDC

Terminal Block Conversion Cable	Pin assugnment and internal wiring
CJ1W-CM213-NC	**CJ1W-NC side**



Connector pin arrangement for X and Z axe			Connector pin arrangement for Y and U axes		
Pin No.	**I/O**	**Designation**	**Pin No.**	**I/O**	**Designation**
A1	IN	Power supply, 24 VDC (for output signals)	B1	IN	Power supply, 24 VDC (for output signals)
A2	IN	GND, 24 VDC (for output signals)	B2	IN	GND, 24 VDC (for output signals)
A3	---	Open Collector Output: Not used	B3	---	Open Collector Output: Not used
	IN	Line Driver Output: GND, 5 VDC (for pulse output)		IN	Line Driver Output: GND, 5 VDC (for pulse output)
A4	---	Open Collector Output: Not used	B4	---	Open Collector Output: Not used
	IN	Line Driver Output: Power supply, 5 VDC (for pulse output)		IN	Line Driver Output: Power supply, 5 VDC (for pulse output)
A5	OUT	Open Collector Output: CW pulse output	B5	OUT	Open Collector Output: CW pulse output
		Line Driver Output: CW pulse output (+)			Line Driver Output: CW pulse output (+)
A6	OUT	Open Collector Output: CW pulse output with 1.6 kΩ resistance	B6	OUT	Open Collector Output: CW pulse output with 1.6 kΩ resistance
		Line Driver Output: CW pulse output (–)			Line Driver Output: CW pulse output (–)
A7	OUT	Open Collector Output: CCW pulse/direction output	B7	OUT	Open Collector Output: CCW pulse/direction output
		Line Driver Output: CCW pulse/direction output (+)			Line Driver Output: CCW pulse/direction output (+)
A8	OUT	Open Collector Output: CCW pulse/direction output with 1.6 kΩ resistance	B8	OUT	Open Collector Output: CCW pulse/direction output with 1.6 kΩ resistance
		Line Driver Output: CCW pulse/direction output (-)			Line Driver Output: CCW pulse/direction output (-)
A9	OUT	Error counter reset output/origin-adjustment command output	B9	OUT	Error counter reset output/origin-adjustment command output
A10	OUT	Error counter reset output with 1.6 kΩ resistance Origin-adjustment command output with 1.6 kΩ resistance	B10	OUT	Error counter reset output with 1.6 kΩ resistance Origin-adjustment command output with 1.6 kΩ resistance
A11	IN	Positioning completed input signal	B11	IN	Positioning completed input signal
A12	IN	Origin common	B12	IN	Origin common
A13	IN	Origin input signal (24 V)	B13	IN	Origin input signal (24 V)
A14	IN	Origin input signal (5 V)	B14	IN	Origin input signal (5 V)
A15	IN	Interrupt input signal	B15	IN	Interrupt input signal
A16	IN	Emergency stop input signal	B16	IN	Emergency stop input signal
A17	IN	Origin proximity input signal	B17	IN	Origin proximity input signal
A18	IN	CW limit input signal	B18	IN	CW limit input signal
A19	IN	CCW limit input signal	B19	IN	CCW limit input signal
A20	IN	Input common	B20	IN	Input common

Terminal Block Conversion Cable	Pin assugnment and internal wiring
CJ1W-CM213-NC	**CS1W-NC side**



Connector pin arrangement for X and Z axe			Connector pin arrangement for Y and U axes		
Pin No.	**I/O**	**Designation**	**Pin No.**	**I/O**	**Designation**
A1	IN	Power supply, 24 VDC (for output signals)	B1	IN	Power supply, 24 VDC (for output signals)
A2	IN	GND, 24 VDC (for output signals)	B2	IN	GND, 24 VDC (for output signals)
A3	---	Open Collector Output: Not used	B3	---	Open Collector Output: Not used
	IN	Line Driver Output: GND, 5 VDC (for pulse output)		IN	Line Driver Output: GND, 5 VDC (for pulse output)
A4	---	Open Collector Output: Not used	B4	---	Open Collector Output: Not used
	IN	Line Driver Output: Power supply, 5 VDC (for pulse output)		IN	Line Driver Output: Power supply, 5 VDC (for pulse output)
A5	OUT	Open Collector Output: CW pulse output	B5	OUT	Open Collector Output: CW pulse output
		Line Driver Output: CW pulse output (+)			Line Driver Output: CW pulse output (+)
A6	OUT	Open Collector Output: CW pulse output with 1.6 kΩ resistance	B6	OUT	Open Collector Output: CW pulse output with 1.6 kΩ resistance
		Line Driver Output: CW pulse output (–)			Line Driver Output: CW pulse output (–)
A7	OUT	Open Collector Output: CCW pulse/direction output	B7	OUT	Open Collector Output: CCW pulse/direction output
		Line Driver Output: CCW pulse/direction output (+)			Line Driver Output: CCW pulse/direction output (+)
A8	OUT	Open Collector Output: CCW pulse/direction output with 1.6 kΩ resistance	B8	OUT	Open Collector Output: CCW pulse/direction output with 1.6 kΩ resistance
		Line Driver Output: CCW pulse/direction output (-)			Line Driver Output: CCW pulse/direction output (-)
A9	---	Not used	B9	---	Not used
A10	OUT	Error counter reset output/origin-adjustment command output	B10	OUT	Error counter reset output/origin-adjustment command output
A11	OUT	Error counter reset output with 1.6 kΩ resistance Origin-adjustment command output with 1.6 kΩ resistance	B11	OUT	Error counter reset output with 1.6 kΩ resistance Origin-adjustment command output with 1.6 kΩ resistance
A12	IN	Positioning completed input signal	B12	IN	Positioning completed input signal
A13	---	Not used	B13	---	Not used
A14	IN	Origin common	B14	IN	Origin common
A15	IN	Origin input signal (24 V)	B15	IN	Origin input signal (24 V)
A16	IN	Origin input signal (5 V)	B16	IN	Origin input signal (5 V)
A17	---	Not used	B17	---	Not used
A18	---	Not used	B18	---	Not used
A19	IN	Interrupt input signal	B19	IN	Interrupt input signal
A20	IN	Emergency stop input signal	B20	IN	Emergency stop input signal
A21	IN	Origin proximity input signal	B21	IN	Origin proximity input signal
A22	IN	CW limit input signal	B22	IN	CW limit input signal
A23	IN	CCW limit input signal	B23	IN	CCW limit input signal
A24	IN	Input common	B24	IN	Input common

Precautions

- Please read and understand the precautions, restrictions, and reminders described on the manuals of PLCs (both of the PLC used in the existing system and the PLC you will use to replace the existing PLC) and sufficiently confirm that the operation is correct before you start actual operation.
- When using terminal block conversion adapters on adjacent units, if there is interference with the wiring of the I/O connection cables, please ensure adequate space by installing a space unit (CJ1W-SP001) or taking other measures to secure the necessary space.
  The maximum number of units that can be connected to the CPU unit or expansion unit is 10, including space units. Since space units are not recognized by the CPU unit or tools such as CX-Programmer, no abnormality will be detected even if the number of connected units exceeds 10 due to the addition of space units. However, if the number of connected units exceeds 10, operational abnormalities in other units (such as high-function I/O unit malfunctions) may occur.
- If you are using a terminal block conversion adapter with a CJ series in an environment that is subject to continuous vibration and shock, please use the reinforcing bracket (optional product).
- Do not pull on the cables or bend them beyond their natural limit. Do not place heavy objects on top of the cables or other lines.

Related Manuals

The following manuals are related to Terminal Block Conversion Adapter. Use there manuals for reference.

Cat. No.	Manual name	Description
P164	CS1 Replacement Guide From CS1G/H to CJ2	When replacing from CS1G/CS1H to CJ2.
W339	CS-series Programmable Controllers Operation Manual	Learning the basic specifications of the CS-series CPU Units, including introductory information, designing, installation, and maintenance.
W472	CJ-series CJ2 CPU Unit Hardware User's Manual	Learning the basic specifications of the CJ2 CPU Units, including introductory information, designing, installation, and maintenance.

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