

CS I/O Terminal Block Conversion Adapters - Conversion Cables CJ1W-AT6 \(\textstyle \te

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

CJ1W-AT6 CJ1W-CM2 CD-CD

Ordering Information

Terminal Block Conversion Adapters/Terminal Block Conversion Cables

Produc	t name	Specifications	Model	Standards *1
	Man	For Relay output, 8 points	CJ1W-AT601	
		For Triac output, 8 points	CJ1W-AT602	
		For Relay output, 16 points For DC input, 16 points	CJ1W-AT611	
CS-series I/O Terminal Block Conversion Adapters		For Transistor output, 16 points	CJ1W-AT612	EU Directives, RCM, UKCA
		For Analog output, 4 points	CJ1W-AT641	
		For Analog input, 4 points/8 points	CJ1W-AT681	
		For Analog output, 8 points	CJ1W-AT682	1
		For High-speed counter unit, 2 channels	CJ1W-CM211-CT	
CS-series I/O Terminal Block Conversion Cables		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 *1	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

^{*1.} Please use PFP-50N or PFP-100N DIN rails when installing the CJ Series.

Product name Model		Specifications		
DIN Trook	PFP-50N	Length: 0.5 m, Height: 7.3 mm		
DIN Track	PFP-100N	Length: 1 m, Height: 7.3 mm		

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: C	J-series *1	Replaced to:	NX-series	Terminal Block Conversion Adapters	
Product name	Number of points	Specifications	Model	Specifications	Model	Specifications	Model	Model	
Relay Output	8 points	250 VAC 2 A, 24 VDC 2 A,	CS1W-OC201	250 VAC 2 A,	CJ1W-OC201			CJ1W-AT601	
Unit	16 points	120 VDC 0.1 A	CS1W-OC211	24 VDC 2 A	CJ1W-OC211			CJ1W-AT611 *2	
Triac Output		0501/40 4 0 4	004114 04004	0501/40004	CJ1W-OA201 *3			0.1414/ 4.7000	
Unit	8 points	250 VAC 1.2 A	CS1W-OA201	250 VAC 0.6 A	CJ1W-OA201-1			CJ1W-AT602	
Transistor	10 11	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	0.1004.47040.40	
Output Unit	16 points	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		CJ1W-AT612 *2	
	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 *4	
Analog Output Unit	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	
	Орошко	4 to 20 mA	CS1W-DA08C	4 to 20 mA	CJ1W-DA08C			00111711002411	
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	4 points	1 to 5 V, 0 to 5 V, 0 to 10 V,	CS1W-AD041-V1	/1 1 to 5 V, 0 to 5 V, CJ1W-AD041-V1					
Unit			CS1W-AD081-V1	-10 to +10 V, 4 to 20 mA	CJ1W-AD081-V1			CJ1W-AT681	
Interrupt Input Unit	16 points	24 VDC 7 mA	CS1W-INT01	24 VDC 7 mA	CJ1W-INT01	24 VDC 7 mA NX-ID5142-1			
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	CJ1W-AT611 *2	

Terminal Block Conversion Cables

Replacement product		Replaced from: CS-series		Replaced to:	Replaced to: CJ-series *1		
Product name Specifications		Specifications Specifications Model Specifications		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	2 channels × 2 units CJ1W-CT021 × 2 units		
Position Control Unit	Position Control Unit, Open-loop control by pulse train output/ Open-collector output	1 axis	CS1W-NC113	1 axis	CJ1W-NC113		
		2 axes	CS1W-NC213	2 axes	CJ1W-NC213		
		4 axes	CS1W-NC413	4 axes	CJ1W-NC413		
		1 axis	CS1W-NC133	1 axis	CJ1W-NC133	CJ1W-CM213-NC	
	Position Control Unit, Open-loop control by pulse train output/	2 axes	CS1W-NC233	2 axes	CJ1W-NC233		
	Line-driver output	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.

^{*4.} The replacement CJ1W I/O Unit requires an external power supply. Please refer to the Internal Wiring Diagram and Replacement Guide (P164).

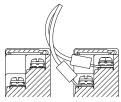
CJ1W-AT6 CJ1W-CM2 CD-CD

Installation Procedure of Terminal Block Conversion Adapter

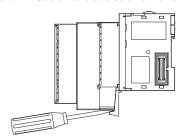
Step	Procedure	Drawing
1	Remove the terminal block from the existing CS1W I/O unit.	Terminal block
2	Lock the Terminal Block Conversion Adapter to the CJ1W I/O Unit.	Terminal block conversion adapter CJ1W I/O unit
3	Attach the terminal block that you removed in step 1 to the Terminal Block Conversion 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.	Terminal block conversion adapter Terminal block CJ1W I/O unit

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

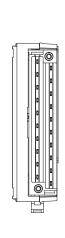
Step	Procedure	Drawing
1	Drill three M4 holes in the mounting section and temporarily	
1	fasten the screws.	DIN track mounting hole centerline CJ I/O Unit CJ I/O Unit 90.8±0.2 Reinforcement Bracket 3-M4
2	Insert the reinforcement bracket by hooking it onto the screws.	
3	Tighten the screws to secure them.	

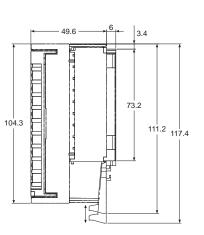
Dimensions (Unit: mm)

29.8

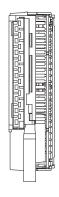
CJ1W-AT601 CJ1W-AT602 CJ1W-AT611 CJ1W-AT612

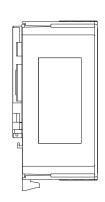






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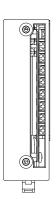


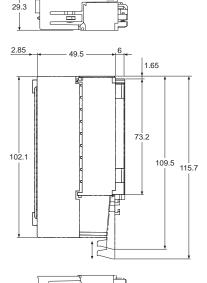


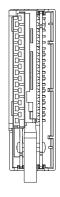
CJ1W-AT641 CJ1W-AT681 CJ1W-AT682

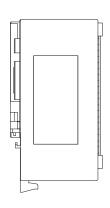






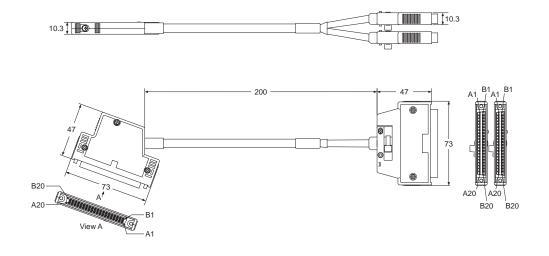




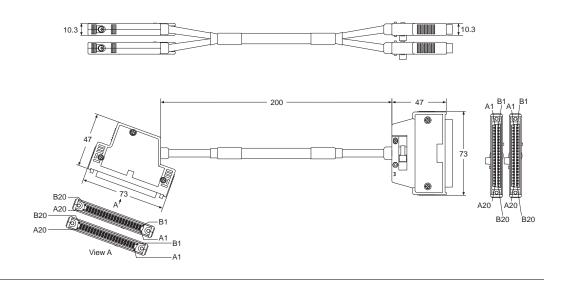


CJ1W-AT6 CJ1W-CM2 CJ1W-CM2

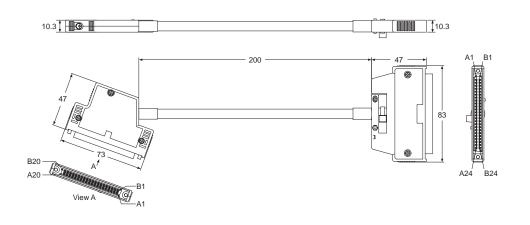
CJ1W-CM211-CT



CJ1W-CM212-CT



CJ1W-CM213-NC

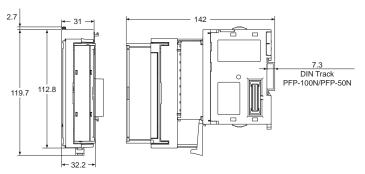


Dimensional Difference List

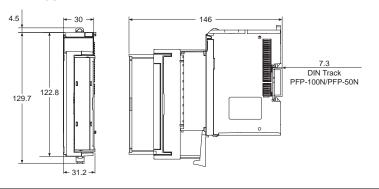
Replace to

CJ1W-AT601/AT602/AT611/AT612

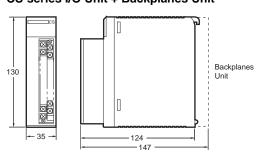
CJ-series I/O Unit + Terminal Block Conversion Adapter + DIN Track



NX-series I/O Unit + Terminal Block Conversion Adapter + DIN Track



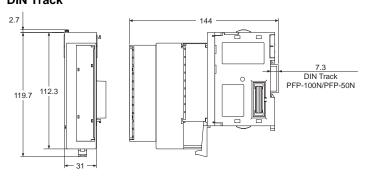
CS-series I/O Unit + Backplanes Unit



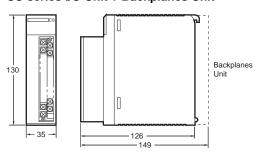
Replace from

CJ1W-AT641/AT681/AT682

CJ-series I/O Unit + Terminal Block Conversion Adapter + DIN Track

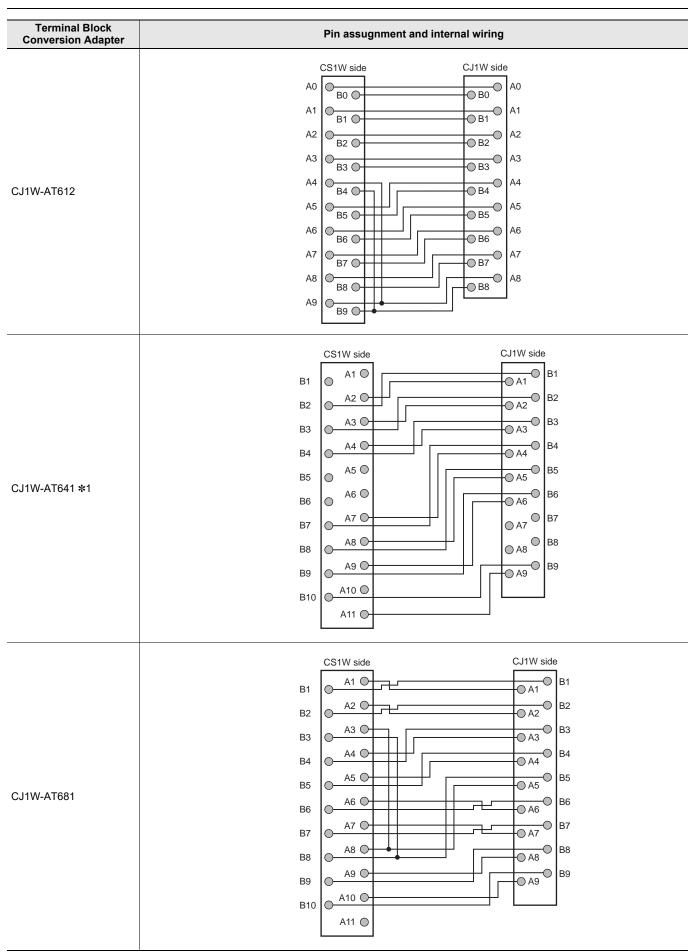


CS-series I/O Unit + Backplanes Unit



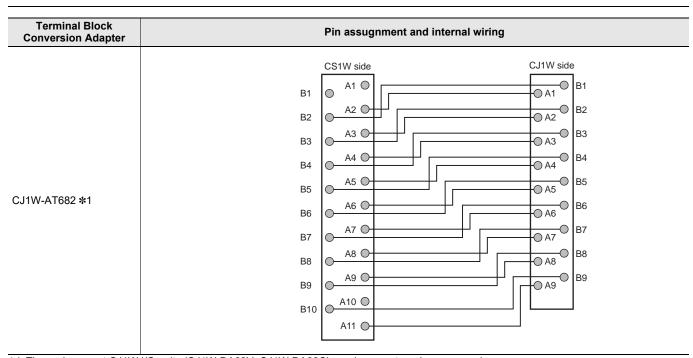
Internal Wiring Diagram

Tamala d Dia da	
Terminal Block Conversion Adapter	Pin assugnment and internal wiring
CJ1W-AT601	CS1W side
CJ1W-AT602	CS1W side
CJ1W-AT611	CS1W side A0 B0 B0 B1 B1 B2 B2 B2 B3 B3 B3 B3 B4 A4 A5 B4 B5 B5 B5 B5 A6 B7 A8 B8 B8 B9 B9 B9 B9 B9 CJ1W side A0 A0 A0 A1 A2 BB A2 A3 A4 A4 A5 B6 A6 A7 A8 B8 B8 B8 B8 B8 B8 B8 B8 B8



^{*1.} The replacement CJ1W I/O unit (CJ1W-DA041) requires an external power supply.

Connect 24 V to terminal A11 and 0 V to terminal B10 of the terminal block removed from the CS1W I/O unit.



^{*1.} The replacement CJ1W I/O units (CJ1W-DA08V, CJ1W-DA08C) require an external power supply.

Connect 24 V to terminal A11 and 0 V to terminal B10 of the terminal block removed from the CS1W I/O unit.

CJ1W-AT6 CJ1W-CM2 CJ1W-CM2

Terminal Block Conversion Cable	Pin assugnment and internal wiring						
	CJ1W-CT021 side						
			B2				
	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			
J1W-CM211-CT	A17	Counter 2 Input B: Line Driver -/0 V	B17	Counter 2 Input B: Line Driver +			
OTW-OMETT-OT	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)	В3	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 a	and inte	rnal wiring		
	CS1W	-CT021 side		CN No.2	A1	CN No.1		
	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
CJ1W-CM211-CT	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)	В3	External Output 3 (PNP)	А3	External Output 1 (NPN)	В3	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	В6	External Control Input 3: 24 VDC	A6	External Control Input 1: COM	В6	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	В8	Counter 1 Input A: Line Driver +
	A9	Counter 2 Input A: 12 VDC	В9	Counter 2 Input A: 24 VDC	A9	Counter 1 Input A: 5 VDC	В9	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
		Netweed	D4.4	N		.	D4.4	The contract of

B14

Not used

A14

Not used

A14

Not used

B14

Not used

Terminal Block Conversion Cable

CJ1W-CT021 side

Unit No.2

Unit No.1

Unit No.2 Unit No.1 Pin Pin Pin Pin Designation Designation Designation Designation No. No. No. No. Counter 4 Input Z: Counter 4 Input Z: Counter 2 Input Z: Counter 2 Input Z: A20 B20 A20 B20 12 VDC 24 VDC 12 VDC 24 VDC Counter 4 Input Z: Counter 4 Input Z: Counter 2 Input Z: Counter 2 Input Z: A19 B19 A19 B19 Line Driver -/0 V Line Driver + Line Driver -/0 V Line Driver + Counter 4 Input B: Counter 4 Input B: Counter 2 Input B: Counter 2 Input B: A18 B18 A18 **B18** 12 VDC 24 VDC 12 VDC 24 VDC Counter 4 Input B: Counter 4 Input B: Counter 2 Input B: Counter 2 Input B: A17 **B17** A17 B17 Line Driver -/0 V Line Driver + Line Driver -/0 V Line Driver + Counter 4 Input A: Counter 4 Input A: Counter 2 Input A: Counter 2 Input A: A16 B16 A16 **B16** 12 VDC 24 VDC 12 VDC 24 VDC Counter 4 Input A: Counter 4 Input A: Counter 2 Input A: Counter 2 Input A: A15 B15 A15 B15 Line Driver -/0 V Line Driver + Line Driver -/0 V Line Driver + A14 Not used B14 Not used A14 Not used B14 Not used Counter 3 Input Z: Counter 3 Input Z: Counter 1 Input Z: Counter 1 Input Z: B13 A13 B13 A13 5 VDC 24 VDC 5 VDC 24 VDC Counter 3 Input Z: Counter 3 Input Z: Counter 1 Input Z: Counter 1 Input Z: B12 B12 A12 A12 Line Driver -/0 V Line Driver + Line Driver -/0 V Line Driver + Counter 3 Input B: Counter 3 Input B: Counter 1 Input B: Counter 1 Input B: B11 A11 B11 A11 5 VDC 24 VDC 5 VDC 24 VDC Counter 3 Input B: Counter 3 Input B: Counter 1 Input B: Counter 1 Input B: B10 A10 B10 A10 Line Driver -/0 V Line Driver -Line Driver -/0 V Line Driver -Counter 3 Input A: Counter 3 Input A: Counter 1 Input A: Counter 1 Input A: A9 В9 A9 В9 5 VDC **24 VDC** 5 VDC 24 VDC Counter 3 Input A: Counter 3 Input A: Counter 1 Input A: Counter 1 Input A: **A8 B8 A8 B8** Line Driver -/0 V Line Driver + Line Driver -/0 V Line Driver + Α7 Not used B7 Not used Α7 Not used B7 Not used **External Control External Control External Control External Control** B6 A6 B6 A6 Input 3: COM Input 3: 24 VDC Input 1: COM Input 1: 24 VDC **External Control** External Control **External Control External Control B**5 Α5 **B**5 A5 Input 2: COM Input 2: 24 VDC Input 0: COM Input 0: 24 VDC A4 Not used B4 Not used A4 Not used B4 Not used External Output 3 External Output 3 External Output 1 External Output 1 А3 В3 А3 В3 (NPN) (PNP) (NPN) (PNP) External Output 2 External Output 2 External Output 0 External Output 0 A2 B2 A2 B2 (NPN) (PNP) (NPN) (PNP) External output External output **External Output** External Output power supply: 12 to 24 VDC power supply: 12 to 24 VDC Α1 B1 Α1 B1 COM: 0 V COM: 0 V

CJ1W-CM212-CT

CN No.1

Terminal Block Conversion Cable		Pin assugnment and internal wiring
	CS1W-CT041 side	CN No.2 A1 B1 A1 B1 CN No.1

CN No.2

B20

24 VDC

Pin Pin Designation Designation Designation Designation No. No. No. External output External output **External Output External Output** В1 В1 power supply: A1 power supply: COM: 0 V COM: 0 V 12 to 24 VDC 12 to 24 VDC External Output 2 External Output 2 External Output 0 External Output 0 A2 B2 B2 A2 (NPN) (PNP) (NPN) (PNP) External Output 3 External Output 3 External Output 1 External Output 1 А3 В3 А3 В3 (NPN) (PNP) (NPN) (PNP) A4 Not used B4 Not used A4 Not used В4 Not used External Control External Control External Control External Control В5 В5 A5 A5 Input 2: COM Input 2: 24 VDC Input 0: COM Input 0: 24 VDC External Control **External Control** External Control **External Control** A6 В6 A6 В6 Input 3: COM Input 3: 24 VDC Input 1: COM Input 1: 24 VDC Α7 Not used В7 Not used Α7 Not used B7 Not used Counter 2 Input A: Counter 2 Input A: Counter 1 Input A: Counter 1 Input A: Α8 B8 Α8 В8 Line Driver -/0 V Line Driver + Line Driver -/0 V Line Driver + Counter 2 Input A: Counter 2 Input A: Counter 1 Input A: Counter 1 Input A: A9 В9 Α9 В9 12 VDC 24 VDC 5 VDC 24 VDC Counter 2 Input B: Counter 2 Input B: Counter 1 Input B: Counter 1 Input B: A10 B10 A10 B10 Line Driver -/0 V Line Driver + Line Driver -/0 V Line Driver + Counter 2 Input B: Counter 2 Input B: Counter 1 Input B: Counter 1 Input B: A11 A11 12 VDC 24 VDC 5 VDC **24 VDC** Counter 2 Input Z: Counter 2 Input Z: Counter 1 Input Z: Counter 1 Input Z: A12 B12 A12 B12 Line Driver -/0 V Line Driver + Line Driver -/0 V Line Driver + Counter 2 Input Z: Counter 2 Input Z: Counter 1 Input Z: Counter 1 Input Z: A13 B13 A13 B13 12 VDC 24 VDC 5 VDC **24 VDC** A14 Not used B14 Not used A14 Not used **B14** Not used Counter 4 Input A: Counter 4 Input A: Counter 3 Input A: Counter 3 Input A: A15 B15 A15 B15 Line Driver -/0 V Line Driver + Line Driver -/0 V Line Driver + Counter 4 Input A: Counter 3 Input A: Counter 3 Input A: Counter 4 Input A: A16 B16 A16 B16 12 VDC 24 VDC 5 VDC 24 VDC Counter 4 Input B: Counter 4 Input B: Counter 3 Input B: Counter 3 Input B: B17 B17 A17 A17 Line Driver -/0 V Line Driver + Line Driver -/0 V Line Driver + Counter 4 Input B: Counter 3 Input B: Counter 4 Input B: Counter 3 Input B: B18 B18 A18 A18 12 VDC 24 VDC 5 VDC 24 VDC Counter 4 Input Z: Counter 4 Input Z: Counter 3 Input Z: Counter 3 Input Z: A19 B19 A19 B19 Line Driver -/0 V Line Driver -/0 V Line Driver + Line Driver + Counter 4 Input Z: Counter 4 Input Z: Counter 3 Input Z: Counter 3 Input Z:

A20

5 VDC

B20 B20

CJ1W-CM212-CT

A20

12 VDC

B20

24 VDC

Terminal Block Conversion Cable

CJ1W-NC side

A20

B20

	Connec	etor pin arrangement for X and Z axe	Connector pin arrangement for Y and U axes			
Pin No.	1/0	Designation	Pin No.	1/0	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)	
		Open Collector Output: Not used			Open Collector Output: Not used	
A3	IN	Line Driver Output: GND, 5 VDC (for pulse output)	В3	IN	Line Driver Output: GND, 5 VDC (for pulse output)	
		Open Collector Output: Not used			Open Collector Output: Not used	
A4	IN	Line Driver Output: Power supply, 5 VDC (for pulse output)	B4	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		
AS	001	Line Driver Output: CW pulse output (+)	DO	001	Line Driver Output: CW pulse output (+)	
A6	OUT	Open Collector Output: CW pulse output with 1.6 $k\Omega$ resistance	В6	OUT	Open Collector Output: CW pulse output wit 1.6 $k\Omega$ resistance	
		Line Driver Output: CW pulse output (–)			Line Driver Output: CW pulse output (-)	
A7	OUT	Open Collector Output: CCW pulse/direction output		OUT	Open Collector Output: CCW pulse/directic output	
Ai	001	Line Driver Output: CCW pulse/direction output (+)	В7	001	Line Driver Output: CCW pulse/direction output (+)	
A8	OUT	Open Collector Output: CCW pulse/direction output with 1.6 $k\Omega$ resistance	B8	OUT	Open Collector Output: CCW pulse/directic output with 1.6 $k\Omega$ resistance	
AO	001	Line Driver Output: CCW pulse/direction output (-)	Во	001	Line Driver Output: CCW pulse/direction output (-)	
A9	OUT	Error counter reset output/origin-adjustment command output	В9	OUT	Error counter reset output/origin-adjustmer command output	
A10	OUT	Error counter reset output with 1.6 k Ω resistance Origin-adjustment command output with 1.6 k Ω resistance	B10	OUT	Error counter reset output with 1.6 k Ω resistance Origin-adjustment command output with 1.6 k Ω 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	

CJ1W-CM213-NC

Terminal Block Conversion Cable	Pin assugnment and internal wiring

CS1W-NC side



Connector pin arrangement for X and Z axe			C	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)	
А3		Open Collector Output: Not used			Open Collector Output: Not used	
	IN	Line Driver Output: GND, 5 VDC (for pulse output)	В3	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 $k\Omega$ resistance	В6	OUT	Open Collector Output: CW pulse output with 1.6 $k\Omega$ resistance	
		Line Driver Output: CW pulse output (-)			Line Driver Output: CW pulse output (-)	
A7		Open Collector Output: CCW pulse/direction output	В7	OUT	Open Collector Output: CCW pulse/direction output	
	OUT	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 $k\Omega$ resistance	В8	OUT	Open Collector Output: CCW pulse/directic output with 1.6 $k\Omega$ resistance	
		Line Driver Output: CCW pulse/direction output (-)			Line Driver Output: CCW pulse/direction output (-)	
A9		Not used	В9		Not used	
A10	OUT	Error counter reset output/origin-adjustment command output	B10	OUT	Error counter reset output/origin-adjustmer command output	
A11	OUT	Error counter reset output with 1.6 k Ω resistance Origin-adjustment command output with 1.6 k Ω resistance	B11	OUT	Error counter reset output with 1.6 k Ω resistance Origin-adjustment command output with 1.6 k Ω 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	

CJ1W-CM213-NC

CJ1W-AT6 \Box /CJ1W-CM2 \Box -B

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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