CJ-series Input Units

CJ1W-ID/IA

CSM CJ1W-INPUT DS F 9 1

A Wide Range of Basic Input Units for High Speed Input and Different Applications

- Receive ON/OFF signals from external devices into the PLC System to update I/O memory in the CPU Unit.
- New high-speed input models CJ1W-ID212 and CJ1W-ID233 are now available. These units can help to increase system throughput.







CJ1W-ID233

Features

- High-speed input models are available, meeting versatile applications.
 ON Response Time: 15µs, OFF Response Time: 90µs
- Use 24-VDC, 100-VAC, and 200-VAC models to connect to devices with different types of outputs.
- The 24-VDC models can be connected to devices with either NPN or PNP outputs. There is no need to select the polarity. *1
- A digital filter in the Unit can be set from 0 to 32 ms to reduce the influence of external noise.
- Either a Fujitsu or MIL connector interface can be used. *2
- Several models of Terminal Block Conversion Units are available, making it easy to connect to external devices.
- *1. The same polarity is used for the same common.
- *2. For models with 32 or 64 inputs.

Ordering Information

International Standards

- The standards are abbreviated as follows: U: UL, U1: UL (Class I Division 2 Products for Hazardous Locations), C: CSA, UC: cULus, UC1: cULus (Class I Division 2 Products for Hazardous Locations), CU: cUL, N: NK, L: Lloyd, and CE: EC Directives.
- Contact your OMRON representative for further details and applicable conditions for these standards.

Input Units

11	Product		Sį	pecifications		Current consumption (A)		Model		
Unit type	name	I/O points	Input voltage and current	Commons	External connection	No. of words allocated	5 V	24 V	Wodel	Standards
		8 inputs	12 to 24 VDC, 10 mA	Independent contacts	Removable terminal block	1 word	0.09	-	CJ1W-ID201	UC1, N, L,
	DC Input Units	16 inputs	24 VDC, 7 mA	16 points, 1 common	Removable terminal block	1 word	0.08	-	CJ1W-ID211	CE
		16 inputs (High speed)	24 VDC, 7 mA	16 points, 1 common	Removable terminal block	1 word	0.13	_	CJ1W-ID212	N, L, CE
		32 inputs	24 VDC, 4.1 mA	16 points, 1 common	Fujitsu connector	2 words	0.09	_	CJ1W-ID231	UC1, N, L,
		32 inputs	24 VDC, 4.1 mA	16 points, 1 common	MIL connector	2 words	0.09	_	CJ1W-ID232	CE
CJ1 Basic I/O Units		32 inputs (High speed)	24 VDC, 4.1 mA	16 points, 1 common	MIL connector	2 words	0.20	_	CJ1W-ID233	N, L, CE
			64 inputs	24 VDC, 4.1 mA	16 points, 1 common	Fujitsu connector	4 words	0.09	_	CJ1W-ID261
	AMIL	64 inputs	24 VDC, 4.1 mA	16 points, 1 common	MIL connector	4 words	0.09	-	CJ1W-ID262	
	AC Input Units	8 inputs	200 to 24 VAC, 10 mA (200 V, 50 Hz)	8 points, 1 common	Removable Terminal Block	1 words	0.08	-	CJ1W-IA201	UC1, N, L, CE
		16 inputs	100 to 120 VAC, 7 mA (100 V, 50 Hz)	16 points, 1 common	Removable Terminal Block	1 words	0.09	-	CJ1W-IA111	

Accessories

Connectors are not included for models with connectors. Either use one of the applicable connector listed below or use an applicable Connector-Terminal Block Conversion Unit or I/O Relay Terminal. For details on wiring methods, refer to *External Interface*.

Applicable Connectors

Fujitsu Connectors for 32-input, 32-output, 64-input, 64-output, 32-input/32-output, and 16-input/16-output Units

Name	Connection	Remarks		Applicable Units	Model	Standards	
	Soldered		or	Fujitsu Connectors: CJ1W-ID231(32 inputs): 1 per Unit	C500-CE404		
40-pin Connectors	Crimped		ising itactor inector	CJ1W-ID261 (64 inputs): 2 per Unit CJ1W-OD231 (32 outputs):1 per Unit CJ1W-OD261 (64 outputs): 2 per Unit CJ1W-MD261 (32 inputs, 32 outputs): 2 per Unit	C500-CE405		
	Pressure welded	FCN-367J040-AU/F			C500-CE403		
24-pin Connectors	Soldered		nector nector er		C500-CE241	_	
	Crimped		tactor inector	Fujitsu Connectors: CJ1W-MD231 (16 inputs, 16 outputs): 2 per Unit	C500-CE242		
	Pressure welded	FCN-367J024-AU/F			C500-CE243		

MIL Connectors for 32-input, 32-output, 64-input, 64-output, 32-input/32-output, and 16-input/16-output Units

Name	Connection	Remarks	Applicable Units	Model	Standards	
40-pin	Pressure welded	FRC5-AO40-3TOS	MIL Connectors: CJ1W-ID232/233 (32 inputs): 1 per Unit CJ1W-OD232/233/234 (32 outputs):1 per Unit	XG4M-4030-T		
Connectors	Crimped	-	CJ1W-ID262 (64 inputs): 2 per Unit CJ1W-OD262/263 (64 outputs): 2 per Unit CJ1W-MD263/563 (32 inputs, 32 outputs): 2 per Unit	XG5N-401*		
20-pin	Pressure welded	FRC5-AO20-3TOS	MIL Connectors:	XG4M-2030-T		
Connectors	Crimped	-	CJ1W-MD232/233 (16 inputs, 16 outputs): 2 per Unit	XG5N-201*	_	

^{*} Crimp Contacts are also required. Refer to page 20 for details.

Applicable Connector-Terminal Block Conversion Units

			Number	Number	Number	Mumbau	Number	Number	Number	Number		Terminal		Size		Mou	nting	Common	Bleeder				
Туре	Series	Series I/O of poles		Wiring method	type	Depth (mm)	Height (mm)	Width (mm)	DIN Track	Screws	terminals			I/O Units	Model	Standards							
				Phillips screw										CJ1W-ID231 CJ1W-ID261	XW2R-J34G-C1								
	PLCs XW2R Out put 34		Name of the last	M3	50	48.35	130.7	-			CJ1W-ID232 CJ1W-ID233 CJ1W-ID262	XW2R-J34G-C2											
		ut 34	(rise up)	МЗ									CJ1W-ID231 CJ1W-ID261	XW2R-E34G-C1									
PLCs			(European type)		45.11	5.11 98.5	Yes	Yes	No	No	No	CJ1W-ID232 CJ1W-ID233 CJ1W-ID262	XW2R-E34G-C2	-									
			Push-in spring					1					CJ1W-ID231 CJ1W-ID261	XW2R-P34G-C1									
				Clamp	50	45.11	98.5						CJ1W-ID232 CJ1W-ID233 CJ1W-ID262	XW2R-P34G-C2									

Note: For the combination of Input Units with Connector-Terminal Block Conversion Units, refer to 2. Connecting Connector-Terminal Block Conversion Units.

Applicable I/O Relay Terminals

						Specific	ations				(horizon ounting)		Mou	inting				
Туре	Type Series		Classi	fication	Polarity	Number of points	Rated ON current at contacts	Operation indicators	Terminal block for power supply wiring	Horizontal (mm)	Vertical (mm)	Height (mm)	DIN Track	Screws	Model	Standards		
		Vertical		Relay outputs		16	5A or 3A								G70D-VSOC16	U, C,		
		type G70D-V		MOSFET relay outputs	NPN	(SPST- NO × 16)	0.3A	Yes	Expandable	135	46	81	Yes	Yes	G70D-VFOM16	CE		
			Outputs	Outputs			8 (SPST- NO × 8)	5A			68	93	44			G70D-SOC08	-	
Space- saving	G70D	Flat type G70D			Outputs	Relay outputs	NPN	16 (SPST- NO × 16)	3A								G70D-SOC16	
						PNP	16 (SPST- NO × 16)	ЗА	Yes	_	156	51 39	Yes	Yes	G70D-SOC16-1			
					MOSFET relay		16 (SPST-	0.3A								G70D-FOM16	_	
				outputs	PNP	NO × 16)									G70D-FOM16-1			
High- capacity, space- saving	G70R		Outputs	Relay outputs	NPN	8 (SPST- NO×8)	10A	Yes	_	136	93	55	Yes	Yes	G70R-SOC08	_		
						AC inputs		16									G7TC-IA16	
			Inputs	DC inputs	NPN	(SPST- NO × 16)	1A			182					G7TC-ID16			
Standard	G7TC	G7TC				8 (SPST- NO × 8)		Yes	_	102	85	68	Yes	_	G7TC-OC08	U, C		
Otaridara	a, ro		Outputs	Relay outputs	NPN	16 (SPST- NO × 16)	5A	100		182		00	100		G7TC-OC16			
					PNP	16 (SPST- NO × 16)				102					G7TC-OC16-1	-		
High-	High- capacity socket (Socket only)				Outouto	Relay	NPN	16 (SPDT× 16	10 A (Terminal	No				64	Vac		G70A-ZOC16-3 (Socket only) + Relay/SSR/ MOSFET Relay/ Timer	U, C,
							Outputs	outputs	PNP	possible with G2R Relays)	block allowable current)	No	_	234	75	64	Yes	ı

Note: For the combination of Input Units with I/O Relay Terminal and Connecting Cables, refer to 3. Connecting I/O Relay Terminals.

Mountable Racks

	NJ sy	ystem	CJ system	(CJ1, CJ2)	CP1H system	NSJ system	
Model	CPU Rack	Expansion Rack	CPU Rack	Expansion Backplane	CP1H PLC	NSJ Controller	Expansion Backplane
CJ1W-ID201							
CJ1W-ID211			10 Units	10 Units (per Expansion Backplane)	Not supported	Not supported	
CJ1W-ID212		10 Units (per Expansion Rack)					10 Units (per Expansion Backplane)
CJ1W-ID231							
CJ1W-ID232	10 Units						
CJ1W-ID233	10 Offics						
CJ1W-ID261							. ,
CJ1W-ID262							
CJ1W-IA201							
CJ1W-IA111							

Specifications

CJ1W-ID201 DC Input Unit (12 to 24-VDC, 8 Points)

Name	8-point DC Input Unit with Terminal Block
Model	CJ1W-ID201
Rated Input Voltage	12 to 24 VDC
Rated Input Voltage Range	10.2 to 26.4 VDC
Input Impedance	2.4 kΩ
Input Current	10 mA typical (at 24 VDC)
ON Voltage/ON Current	8.8 VDC min./3 mA min.
OFF Voltage/OFF Current	3 VDC max./1 mA max.
ON Response Time	8.0 ms max. (Can be set to between 0 and 32 ms in the Setup.) *1
OFF Response Time	8.0 ms max. (Can be set to between 0 and 32 ms in the Setup.) *1
Number of Circuits	8 independent circuits
Number of Simultaneously ON Points	100% simultaneously ON
Insulation Resistance	20 M Ω between external terminals and the GR terminal (100 VDC)
Dielectric Strength	1,000 VAC between the external terminals and the GR terminal for 1 minute at a leakage current of 10 mA max.
Internal Current Consumption	80 mA max.
Weight	110 g max.
Circuit Configuration	Signal name Jxx_Ch1_In00 o COM0 Jxx_Ch1_In07 o Jxx_Ch1_In07 o Liput indicator COM7 o The signal names of the terminals are the device variable names. The device variable names are the names that use "Jxx" as the device name.
External connection and terminal-device variable diagram	Polarity of the input power supply can be connected in either direction. • Polarity and the terminals are the device variable names. The signal names of the terminals are the device variable names. The signal names are the names that use "Lyx" as the device pame.

^{*1.} The ON response time will be 20 μs maximum and OFF response time will be 400 μs maximum even if the response time are set to 0 ms due to internal element delays.

The device variable names are the names that use "Jxx" as the device name.

Note: Although 16 I/O bits (1 word) are allocated, only 8 of these can be used for external I/O.

^{*2.} Terminal numbers A0 to A8 and B0 to B8 are used in the external connection and terminal-device variable diagrams. They are not printed on the Units.

CJ1W-ID211 DC Input Unit (24 VDC, 16 Points)

Name	16-point DC Input Unit with Terminal Block							
Model	CJ1W-ID211							
Rated Input Voltage	24 VDC							
Rated Input Voltage Range	20.4 to 26.4 VDC							
Input Impedance	3.3 kΩ							
Input Current	7 mA typical (at 24 VDC)							
ON Voltage/ON Current	4.4 VDC min./3 mA min.							
OFF Voltage/OFF Current	5 VDC max./1 mA max.							
ON Response Time	3.0 ms max. Can be set to between 0 and 32 ms in the Setup.) *1							
OFF Response Time	8.0 ms max. (Can be set to between 0 and 32 ms in the Setup.) *1							
Number of Circuits	16 (16 points/common, 1 circuit)							
Number of Simultaneously ON Points	100% simultaneously ON (at 24 VDC) (Refer to the following illustration.)							
Insulation Resistance	20 M Ω between external terminals and the GR terminal (100 VDC)							
Dielectric Strength	1,000 VAC between the external terminals and the GR terminal for 1 minute at a leakage current of 10 mA max.							
Internal Current Consumption	80 mA max.							
Weight	110 g max.							
Circuit Configuration	Signal names of the terminals are the device variable names. The device variable names are the names that use "Jxx" as the device name.							
External connection and terminal-device variable diagram	Signal name Signal name Signal name Signal name							

^{*1.} The ON response time will be 20 μs maximum and OFF response time will be 400 μs maximum even if the response time are set to 0 ms due to internal element delays.
*2. Terminal numbers A0 to A8 and B0 to B8 are used in the external connection and terminal-device variable diagrams. They are not printed on

the Units.

CJ1W-ID212 DC Input Unit (24 VDC, 16 Points)

	C input Unit (24 VDC, 16 Points)							
Name	16-point DC Input Unit with Terminal Block							
Model	CJ1W-ID212							
Rated Input Voltage	24 VDC							
Rated Input Voltage Range	20.4 to 26.4 VDC							
Input Impedance	3.3 kΩ							
Input Current	7 mA typical (at 24 VDC)							
ON Voltage/ON Current	14.4 VDC min./3 mA min.							
OFF Voltage/OFF Current	5 VDC max./1 mA max.							
ON Response Time	8.0 ms max. (Can be set to between 0 and 32 ms in the Setup.) *1							
OFF Response Time	8.0 ms max. (Can be set to between 0 and 32 ms in the Setup.) *1							
Number of Circuits	16 (16 points/common, 1 circuit)							
Number of Simultaneously ON Points	100% simultaneously ON (at 24 VDC) (Refer to the following illustration.)							
Insulation Resistance	20 MΩ between external terminals and the GR terminal (100 VDC)							
Dielectric Strength	1,000 VAC between the external terminals and the GR terminal for 1 minute at a leakage current of 10 mA max.							
Internal Current Consumption	130 mA max.							
Weight	110 g max.							
Circuit Configuration	The signal names of the terminals are the device variable names. The device variable names are the names that use "Jxx" as the device name.							
External connection and terminal-device variable diagram	Signal name Connector pin '2 Signal name Data Ch1_In00 A0 B0 Jxx_Ch1_In01 Jxx_Ch1_In02 A1 B1 Jxx_Ch1_In03 Jxx_Ch1_In04 A2 B2 Jxx_Ch1_In05 Jxx_Ch1_In08 A4 B4 Jxx_Ch1_In07 Jxx_Ch1_In10 A5 B5 Jxx_Ch1_In11 A6 B6 Jxx_Ch1_In11 COM A8 B7 COM A8 B7 COM Polarity of the input power supply can be connected in either direction. The signal names of the terminals are the device variable names. The device variable names are the names that use "Jxx" as the device name.							

^{*1.} The ON response time will be 15 μs maximum and OFF response time will be 90 μs maximum even if the response time are set to 0 ms due to internal element delays.
*2. Terminal numbers A0 to A8 and B0 to B8 are used in the external connection and terminal-device variable diagrams. They are not printed on

the Units.

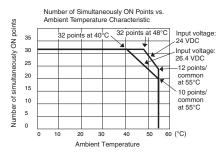
CJ1W-ID231 DC Input Unit (24 VDC, 32 Points)

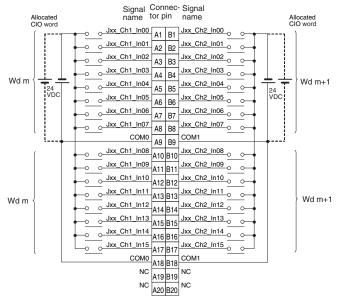
Name	32-point DC Input Unit with Fujitsu Connector						
Model	CJ1W-ID231						
Rated Input Voltage	24 VDC						
Rated Input Voltage Range	20.4 to 26.4 VDC						
Input Impedance	5.6 kΩ						
Input Current	1 mA typical (at 24 VDC)						
ON Voltage/ON Current	9.0 VDC min./3 mA min.						
OFF Voltage/OFF Current	5 VDC max./1 mA max.						
ON Response Time	8.0 ms max. (Can be set to between 0 and 32 in the Setup.) *						
OFF Response Time	8.0 ms max. (Can be set to between 0 and 32 in the Setup.) *						
Number of Circuits	32 (16 points/common, 2 circuits)						
Number of Simultaneously ON Points	75% (12 points/common) simultaneously ON (at 24 VDC) (Refer to the following illustration.)						
Insulation Resistance	20 M Ω between external terminals and the GR terminal (100 VDC)						
Dielectric Strength	1,000 VAC between the external terminals and the GR terminal for 1 minute at a leakage current of 10 mA max.						
Internal Current Consumption	90 mA max.						
Weight	70 g max.						
Accessories	None						
	Allocated Signal CIO word name Number of Simultaneously ON Points vs. (Number of Simultaneously ON Points vs. Ambient Temperature Characteristic						

Circuit Configuration

• The signal names of the terminals are the device variable names. The device variable names are the names that use "Jxx" as the device name.

5.6 kΩ





External connection and terminal-device variable diagram

- The input power polarity can be connected in either direction.
 Be sure to wire both pins A9 and A18 (COM0), and set the same polarity for both pins.
- Be sure to wire both pins B9 and B18 (COM1), and set the same polarity for both pins.

The signal names of the terminals are the device variable names.
 The device variable names are the names that use "Jxx" as the device name.

Note: Observe the following restrictions when connecting to a 2-wire sensor.

- Make sure the input power supply voltage is larger than the ON voltage (19 V) plus the residual voltage of the sensor (approx. 3 V).
- Use a sensor with a minimum load current of 3 mA min.
- Connect bleeder resistance if you connect a sensor with a minimum load current of 5 mA or higher.

^{*} The ON response time will be 20 µs maximum and OFF response time will be 400 µs maximum even if the response times are set to 0 ms due to internal element delays.

CJ1W-ID232 DC Input Unit (24 VDC, 32 Points)

Model CJ1W- Rated Input Voltage 24 VDC Rated Input Voltage Range 20.4 to Input Impedance 5.6 kΩ Input Current 4.1 mA ON Voltage/ON Current 19.0 V OFF Voltage/OFF Current 8.0 ms ON Response Time 8.0 ms ON Response Time 8.0 ms Number of Circuits 32 (16 Number of Simultaneously ON Points 1,000 N Insulation Resistance 20 MΩ Internal Current Consumption 90 mA Weight 70 g m Accessories None Circuit Configuration Corrow • The second The second The second ON Response Time Response Time Response Time Number of Circuits 32 (16 Number of Simultaneously 75% (1 ON Points 75% (1 Number of Simultaneously 70 mA ON Points 70 g m ON Points 7	26.4 VDC 26.4 VDC 26.4 VDC) DC min/3 mA min. max./1 mA max. max. (Can be set to between 0 and 32 in the Setup.) * max. (Can be set to between 0 and 32 in the Setup.) * points/common, 2 circuits) 2 points/common) simultaneously ON (at 24 VDC) (Refer to the following illustration.) between external terminals and the GR terminal (100 VDC) VAC between the external terminals and the GR terminal for 1 minute at a leakage current of 10 mA max. max. ax. Allocated Signal CIO word Name of Simultaneously ON Points vs. Ambient Temperature Characteristic Signal Number of Simultaneously ON Points vs. Ambient Temperature Characteristic Signal Number of Simultaneously ON Points vs. Ambient Temperature Characteristic Signal
Rated Input Voltage Rated Input Voltage Range Rated Input Voltage Range Rated Input Voltage Range Rated Input Voltage Range Solve Input Impedance Input Current ON Voltage/ON Current Solve Voltage/OFF Current ON Response Time Roman Ro	26.4 VDC 26.4 VDC 26.4 VDC) DC min/3 mA min. max./1 mA max. max. (Can be set to between 0 and 32 in the Setup.) * max. (Can be set to between 0 and 32 in the Setup.) * points/common, 2 circuits) 2 points/common, 3 multaneously ON (at 24 VDC) (Refer to the following illustration.) between external terminals and the GR terminal (100 VDC) VAC between the external terminals and the GR terminal for 1 minute at a leakage current of 10 mA max. max. ax. Allocated Allocated Jux_Ch1_In15 Jux_Ch1_In15 Jux_Ch2_In00 Jux_Ch1_In15 Jux_Ch2_In15 Jux_Ch2
Rated Input Voltage Range Input Impedance 5.6 kΩ Input Current 4.1 mA ON Voltage/ON Current 19.0 VIOFF Voltage/OFF Current 8.0 ms OFF Response Time 8.0 ms Number of Circuits 32 (16 Number of Simultaneously ON Points Insulation Resistance 20 MΩ Internal Current Consumption 90 mA Accessories None Circuit Configuration Corrow	26.4 VDC At typical (at 24 VDC) DC min./3 mA min. max./1 mA max. max. (Can be set to between 0 and 32 in the Setup.) * max. (Can be set to between 0 and 32 in the Setup.) * points/common, 2 circuits) 2 points/common) simultaneously ON (at 24 VDC) (Refer to the following illustration.) between external terminals and the GR terminal (100 VDC) VAC between the external terminals and the GR terminal for 1 minute at a leakage current of 10 mA max. max. ax. Allocated Signal CIO word Jax. Ch1_In10 Jax. Ch1_In15 J
Input Impedance Input Current ON Voltage/ON Current ON F Voltage/OFF Current ON Response Time ON Response Time Soff Response Time Number of Circuits Soff Response Time Number of Simultaneously ON Points Insulation Resistance Dielectric Strength Internal Current Consumption Weight Accessories Circuit Configuration Corrow The se	Allocated Signal State Sta
Input Current ON Voltage/ON Current OFF Voltage/OFF Current ON Response Time ON Response Time Soff Response Time Number of Circuits Number of Simultaneously ON Points Insulation Resistance Dielectric Strength Internal Current Consumption Weight Accessories Circuit Configuration Corrow The se	Allocated
ON Voltage/ON Current OFF Voltage/OFF Current ON Response Time ON Response Time Soff Response Time Number of Circuits Number of Simultaneously ON Points Insulation Resistance Dielectric Strength Internal Current Consumption Weight Accessories Circuit Configuration Corrow The second of the property of the	max. (Can be set to between 0 and 32 in the Setup.) * max. (Can be set to between 0 and 32 in the Setup.) * max. (Can be set to between 0 and 32 in the Setup.) * points/common, 2 circuits) 2 points/common) simultaneously ON (at 24 VDC) (Refer to the following illustration.) between external terminals and the GR terminal (100 VDC) VAC between the external terminals and the GR terminal for 1 minute at a leakage current of 10 mA max. max. ax. Allocated Signal ClO word Name of Simultaneously ON Points vs. Ambient Temperature Characteristic Input voltage: 24 VDC COMO ON Points vs. Ambient Temperature Characteristic Input voltage: 12 points/common at 55°C Name of Simultaneously ON Points vs. Ambient Temperature Characteristic Input voltage: 12 points/common at 55°C Name of Simultaneously ON Points vs. Ambient Temperature Characteristic Input voltage: 12 points/common at 55°C Name of Simultaneously ON Points vs. Ambient Temperature Characteristic Input voltage: 13 points/common at 55°C Name of Simultaneously ON Points vs. Ambient Temperature Characteristic Input voltage: 14 Do points/common at 55°C Name of Simultaneously ON Points vs. Ambient Temperature Characteristic Input voltage: 15 points/common at 55°C Name of Simultaneously ON Points vs. Ambient Temperature Characteristic Input voltage: 16 points/common at 55°C Name of Simultaneously ON Points vs. Ambient Temperature Characteristic Input voltage: 17 points/common at 55°C Name of Simultaneously ON Points vs. Ambient Temperature Characteristic Input voltage: 18 points/common at 55°C Name of Simultaneously ON Points vs. Ambient Temperature Characteristic Input voltage: 19 points/common Name of Simultaneously ON Points vs. Ambient Temperature Characteristic Input voltage: 19 points/common Name of Simultaneously ON Points vs. Ambient Temperature Characteristic Input voltage: 19 points/common Name of Simultaneously ON Points vs. Ambient Temperature Characteristic Input voltage: 19 points/common Name of Simultaneously ON Points vs. Ambient Temperature Characteri
OFF Voltage/OFF Current ON Response Time OFF Response Time Number of Circuits Number of Simultaneously ON Points Insulation Resistance Dielectric Strength Internal Current Consumption Weight Accessories Circuit Configuration Corrow The se	max. (Can be set to between 0 and 32 in the Setup.) * max. (Can be set to between 0 and 32 in the Setup.) * points/common, 2 circuits) 2 points/common) simultaneously ON (at 24 VDC) (Refer to the following illustration.) between external terminals and the GR terminal (100 VDC) VAC between the external terminals and the GR terminal for 1 minute at a leakage current of 10 mA max. max. ax. Allocated CiOword Jax_Ch1_In00 Jax_Ch1_In00 Jax_Ch1_In00 Jax_Ch1_In00 Jax_Ch1_In00 Jax_Ch1_In00 Jax_Ch1_In00 Jax_Ch2_In00 Jax_Ch1_In00 Jax_Ch2_In00 Jax_Ch2
Current ON Response Time OFF Response Time Number of Circuits Number of Simultaneously ON Points Insulation Resistance Dielectric Strength Internal Current Consumption Weight Accessories Circuit Configuration Corrow The se	max. (Can be set to between 0 and 32 in the Setup.) * max. (Can be set to between 0 and 32 in the Setup.) * points/common, 2 circuits) 2 points/common) simultaneously ON (at 24 VDC) (Refer to the following illustration.) between external terminals and the GR terminal (100 VDC) VAC between the external terminals and the GR terminal for 1 minute at a leakage current of 10 mA max. max. ax. Allocated Signal CIO word Signal
OFF Response Time Number of Circuits Number of Simultaneously ON Points Insulation Resistance Dielectric Strength Internal Current Consumption Weight Accessories Circuit Configuration Corrow The se	max. (Can be set to between 0 and 32 in the Setup.) * points/common, 2 circuits) 2 points/common) simultaneously ON (at 24 VDC) (Refer to the following illustration.) between external terminals and the GR terminal (100 VDC) VAC between the external terminals and the GR terminal for 1 minute at a leakage current of 10 mA max. max. ax. Number of Simultaneously ON Points vs. Ambient Temperature Characteristic Input voltage: 24 VDC Input voltage: 26 4 VDC Input voltage: 26 1 VDC Input voltage: 26 2 VDC Input voltage: 26 3 VDC Input voltage: 26 4 VDC Input voltage: 26 4 VDC Input voltage: 26 4 VDC Input voltage: 27 VDC Input voltage: 28 1 VDC Input voltage: 29 1 VDC Input voltage: 20 1 VDC Input voltage: 20 1 VDC Input voltage: 20 2 VDC Input voltage: 20 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
Number of Circuits Number of Simultaneously 75% (1 75% (1 75% (1 1 75% (1 1 1 75% (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	points/common, 2 circuits) 2 points/common) simultaneously ON (at 24 VDC) (Refer to the following illustration.) between external terminals and the GR terminal (100 VDC) VAC between the external terminals and the GR terminal for 1 minute at a leakage current of 10 mA max. max. ax. Allocated CIO word Iname Allocated CIO word Iname Signal Iname Ambient Temperature Characteristic Input voltage: 24 VDC 10 points/common at 55°C 10 points/common at 55°C 10 points/common at 55°C
Number of Simultaneously DN Points 75% (1 75	2 points/common) simultaneously ON (at 24 VDC) (Refer to the following illustration.) between external terminals and the GR terminal (100 VDC) VAC between the external terminals and the GR terminal for 1 minute at a leakage current of 10 mA max. max. ax. Allocated Cloword name Wd Jxx_Ch1_In15 COM0 Ambient Temperature Characteristic Input voltage: 24 VDC 10 points/common at 55°C 10 points/common at 55°C 10 points/common at 55°C
DN Points NSW (1) NSW	between external terminals and the GR terminal (100 VDC) VAC between the external terminals and the GR terminal for 1 minute at a leakage current of 10 mA max. max. ax. Allocated CIO word name OMD Jxx_Ch1_In10 OMD Jxx_Ch1_In15 OMD Jxx_Ch1_In15 OMD OMD Input voltage: 24 VDC Input voltage: 24 VDC Input voltage: 24 VDC Input voltage: 24 VDC Input voltage: 25 A VDC Input voltage: 25 A VDC Input voltage: 26 A VDC Input voltage: 27 Ambient Temperature Number of Simultaneously ON Points vs. Ambient Temperature Number of Simultaneously ON
Dielectric Strength 1,000 Value of the result of the resul	Wd m Jxx_Ch1_In15
nternal Current Consumption 90 mA Weight 70 g m Accessories None Circuit Configuration Corrow The second	max. ax. Allocated Signal CIO word name Number of Simultaneously ON Points vs. Ambient Temperature Characteristic Number of Simultaneously ON Points vs. Ambient Temperature Characteristic Number of Simultaneously ON Points vs. Ambient Temperature Characteristic Number of Simultaneously ON Points vs. Ambient Temperature Characteristic Number of Simultaneously ON Points vs. Ambient Temperature Characteristic No 30 No 3
Weight 70 g m Accessories None Corcuit Configuration Corrow The second of the secon	Allocated Signal CIO word name Number of Simultaneously ON Points vs. Ambient Temperature Characteristic Number of Simultaneously ON Points vs. Ambient Temperature Characteristic Number of Simultaneously ON Points vs. Ambient Temperature Characteristic Number of Simultaneously ON Points vs. Ambient Temperature Characteristic Number of Simultaneously ON Points vs. Ambient Temperature Characteristic No 30 Number of Simultaneously ON Points vs. Ambient Temperature Characteristic No 32 points at 40°C, 32 points at 48°C 164 VDC 179 points/common at 55°C 10 points/common at 55°C 10 points/common at 55°C Ambient Temperature Number of Simultaneously ON Points vs. Ambient Temperature Characteristic 10 points/common at 55°C 10 points/common at 55°C 10 points/common at 55°C
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Circuit Configuration Corror • The s	Number of Simultaneously ON Points vs. Ambient Temperature Characteristic Number of Simultaneously ON Points vs. Ambient Temperature Characteristic SW Number of Simultaneously ON Points vs. Ambient Temperature Characteristic 1
	signal names of the terminals are the device variable names. device variable names are the names that use "Jxx" as the device name.
	Allocated CIO word Signal name Connc Signal name CiO word
• Be s	input power polarity can be connected in either direction. Sure to wire both pins. Sure to wire both pins 23 and 24 (COM1), and set the same polarity for both pins. Sure to wire both pins 3 and 4 (COM1), and set the same polarity for both pins.

^{*} The ON response time will be 20 μs maximum and OFF response time will be 400 μs maximum even if the response times are set to 0 ms due to internal element delays.

Note: Observe the following restrictions when connecting to a 2-wire sensor.

- Make sure the input power supply voltage is larger than the ON voltage (19 V) plus the residual voltage of the sensor (approx. 3 V).
 Use a sensor with a minimum load current of 3 mA min.
- Connect bleeder resistance if you connect a sensor with a minimum load current of 5 mA or higher.

CJ1W-ID233 DC Input Unit (24 VDC, 32 Points)

Model CITW-10293 Rated input Votage Rated input General 100 Merch Votage Range 100	Model CJ1W-ID2 Rated Input Voltage 24 VDC Rated Input Voltage Range 20.4 to 26 Input Impedance 5.6 kΩ Input Current 4.1 mA ty ON Voltage/ON Current 19.0 VDC OFF Voltage/OFF Current 5 VDC ma ON Response Time 8.0 ms ma OFF Response Time 8.0 ms ma Number of Circuits 32 (16 po Number of Simultaneously ON Points 1,000 VA Insulation Resistance 20 MΩ be Dielectric Strength 1,000 VA Internal Current Consumption 200 mA ma Connection Connection Circuit Configuration Connection Circuit Configuration Connection Connection Connection Circuit Configuration Connection Connection Connection Connection Connection Connection Connection Connection Connection Connection Connection Connection Connection Connection Connection Connection Connection Connectio	put Unit (24 VDC, 32 Points)								
Rated Input Voltage Ripput Unitage Range 90 4 V VCC Ripput Current 91 4 V PC 100 Voltage OND Voltage O	Rated Input Voltage	'								
Rated input Vottage Range Input Current 5.6 KU Input Current 6.7 VOT CHISCAT TWA MIX. 6.7 VOT	Rated Input Voltage Range Input Impedance 5.6 kΩ Input Impedance 5.6 kΩ Input Current 4.1 mA ty ON Voltage/ON Current 19.0 VDC mCOFF Voltage/OFF Current 5 VDC mcON Response Time 8.0 ms mcOFF Response Time 8.0 ms mcOFF Response Time 32 (16 po Number of Simultaneously ON Points Insulation Resistance 20 MΩ be Dielectric Strength 1,000 VAI Internal Current Consumption Weight 70 g max. Accessories None Circuit Configuration External connection and terminal-device									
Input Unpred 5,6 k2 Imput Current 4,1 m A typeal (at 24 VDC)	Input Impedance 5.6 kΩ Input Current 4.1 mA ty ON Voltage/ON Current 19.0 VDC mode									
Ingut Current OF VoltageOFF Current S VOC max/1 mA max. Con be set to between 0 and 32 in the Setup.)* 0.0 ms max. (Can be set to between 0 and 32 in the Setup.)* 2.0 ms max. (Can be set to between 0 and 32 in the Setup.)* 2.1 (the points/common, 2 circuits) Number of Simulatineously ON Points On Poi	Input Current 4.1 mA ty ON Voltage/ON Current 19.0 VDC OFF Voltage/OFF Current 5 VDC ms ON Response Time 8.0 ms ms OFF Response Time 32 (16 po Number of Circuits 75% (12 po Number of Simultaneously ON Points 1,000 VA Internal Current Consumption 200 mA m Veight 70 g max. Accessories None External connection and terminal-device External connection and terminal-device	26.4 VDC								
DN VoltageON Current For VoltageOFF Corrent F	ON Voltage/ON Current OFF Voltage/OFF Current ON Response Time OFF Response Time Number of Circuits Number of Simultaneously ON Points Insulation Resistance Dielectric Strength Internal Current Consumption Weight Accessories Circuit Configuration External connection and terminal-device External connection and terminal-device									
OFF VollageOFF Current ON Response Time 0.0 ms max. (Can be set to between 0 and 32 in the Setup.)* 3.2 (16 pointscommon, 2 circuits) 3.2 (16 pointscommon, 2 circuits) 3.3 (16 pointscommon, 2 circuits) 3.4 (16 pointscommon, 2 circuits) 3.5 (16 pointscommon, 2 circuits) 3.6 (16 pointscommon, 2 circuits) 3.7 (17	OFF Voltage/OFF Current ON Response Time OFF Response Time Number of Circuits Number of Simultaneously ON Points Insulation Resistance Dielectric Strength Internal Current Consumption Weight Accessories Circuit Configuration External connection and terminal-device External connection and terminal-device									
De Response Time 3.0 m smax. (Can be set to between 0 and 32 in the Setup.)* 32 (16 points/common, 2 circuits) 32 (16 points/common, 2 circuits) 75% (12 points/common) simultaneously ON (at 24 VDC). (Refer to the following illustration.) 76% (12 points/common) simultaneously ON (at 24 VDC). (Refer to the following illustration.) 77% (12 points/common) simultaneously ON (at 24 VDC). (Refer to the following illustration.) 80 MΩ between external terminals and the GR terminal (100 VDC) 90 mA max. 90	ON Response Time 8.0 ms mm. Number of Circuits 32 (16 po Number of Simultaneously ON Points 1,000 VAI Internal Current Consumption Weight 70 g max. None Circuit Configuration External connection and terminal-device 8.0 ms mm. 8.0 ms mm. 8.0 ms mm. 92 (16 po 75% (12 g) 75%	DC min./3 mA min.								
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Number of Circuits Number of Circuits Number of Simultaneously ON Points 1,000 VAC Deliven the external terminals and the GR terminal (100 VDC) 1,000 VAC Deliven the external terminals and the GR terminal for 1 minute at a leakage current of 10 mA max. 20 mA max.	Number of Circuits Number of Simultaneously ON Points Insulation Resistance Dielectric Strength Internal Current Consumption Weight Accessories Circuit Configuration External connection and terminal-device External connection and terminal-device	max. (Can be set to between 0 and 32 in the Setup.) *								
Number of Simultaneously No Points Deletion Resistance Dieleticis Streight 1,000 VAC between external terminals and the GR terminal (100 VDC) Dieleticis Streight 1,000 VAC between the external terminals and the GR terminal for 1 minute at a leakage current of 10 mA max. Weight 70 g max. Accessories None Circuit Configuration Circuit Configuration The device variable names are the names that use "Just as the device variable names." The device variable names are the names that use "Just as the device variable names." The device variable names are the names that use "Just as the device variable names." External connection and terminal-device variable diagram Will may be a supplied to the device variable names. Will may be a supplied to the device variable names. The device variable names are the names that use "Just as the device variable names." Will may be a supplied to the device variable names. The device variable names are the names that use "Just as the device variable names." Will may be a supplied to the device variable names. The device variable names are the names that use "Just as the device variable names." Will may be a supplied to the device variable names. The device variable names are the names that use "Just as the device variable names." Will may be a supplied to the device variable names. The device variable names are the names that use "Just as the device variable names." Will may be a supplied to the device variable names. Will may be a supplied to the device variable names. Will may be a supplied to the device variable names. Will may be a supplied to the device variable names. Will may be a supplied to the device variable names. Will may be a supplied to the device variable names. Will may be a supplied to the device variable names. Will may be a supplied to the device variable names. Will may be a supplied to the device variable names. Will may be a supplied to the device variable names. Will may be a supplied to the device variable names. Will may be a suppli	Number of Simultaneously ON Points 75% (12 grant 12 grant 12 grant 13 grant 12 grant 14 grant 14 grant 14 grant 14 grant 15 grant	max. (Can be set to between 0 and 32 in the Setup.) *								
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Dielectric Strength Internal Current Consumption 200 mA max. 200 mA max. 200 mA max. Accessories None Accessories Accessories None Accessories None Accessories	Dielectric Strength 1,000 VA Internal Current 200 mA m Weight 70 g max. Accessories None Circuit Configuration Conner row A The sign The devi	2 points/common) simultaneously ON (at 24 VDC) (Refer to the following illustration.)								
Internal Current Consumption Weight 70 g max. Accessories None Ancessories None Ancessories None Ancessories None Ancessories None Current Configuration Weight Accessories Accessories None Current Configuration Weight Ancessories A	Internal Current Consumption Weight 70 g max Accessories None Connerow A Circuit Configuration Connerow B • The sign The devi	between external terminals and the GR terminal (100 VDC)								
Circuit Configuration Wid m Jax. Cnt. Inso J	Consumption Weight 70 g max. Accessories None Connerow A Circuit Configuration Connerow B • The sign The devi	'AC between the external terminals and the GR terminal for 1 minute at a leakage current of 10 mA max.								
Alicented Circuit Configuration Circuit Configuration Circuit Configuration Alicented Signal Agreement of Signal Agreement	Conner ow A Circuit Configuration Conner row B • The sign The devi	ı max.								
Allocated Cil owed and signal rame of the terminals are the device variable names. **The signal names of the terminals are the device variable names.** **Allocated Cil owed May Device of County of the terminals are the device variable names.** **Allocated Cil owed May Device of County of the terminals are the device variable names.** **The signal names of the terminals are the device variable names.** **Allocated Cil owed May Device of the terminals are the device variable names.** **Allocated Cil owed May Device variable names.** **Allocated Cil owed Ma	Circuit Configuration Connection The sign The devi	3X.								
Circuit Configuration Connector Wid m Jax, Ch1 Jin 10 Jo Jo Ch1 Jin 10 Jo	Circuit Configuration Connection The sign The devi									
External connection and terminal-device variable diagram Wd m	and terminal-device	Number of Simultaneously ON Points vs. Ambient Temperature Characteristic Number of Simultaneously ON Points vs. Ambient Temperature Characteristic Number of Simultaneously ON Points vs. Ambient Temperature Characteristic Input voltage: 24 VDC Input voltage: 24 VDC Input voltage: 26 VDC 12 points/common at 55°C 10 points/common at 55°C Number of Simultaneously ON Points vs. Ambient Temperature Characteristic								
The input power polarity can be connected in either direction. Be sure to wire both pins 23 and 24 (COM0), and set the same polarity for both pins. Be sure to wire both pins 3 and 4 (COM1), and set the same polarity for both pins.	Be sure	CIO word								

^{*} The ON response time will be 15 μs maximum and OFF response time will be 90 μs maximum even if the response times are set to 0 ms due Note: Observe the following restrictions when connecting to a 2-wire sensor.

• Make sure the input power supply voltage is larger than the ON voltage (19 V) plus the residual voltage of the sensor (approx. 3 V).

• Use a sensor with a minimum load current of 3 mA min.

- Connect bleeder resistance if you connect a sensor with a minimum load current of 5 mA or higher.

CJ1W-ID261 DC Input Unit (24 VDC, 64 Points)

	- mpar - m (2 : 12 - 6 : 1 - m m)		
Name	64-point DC Input Unit with Fujitsu Connector		
Model	CJ1W-ID261		
Rated Input Voltage	24 VDC		
Rated Input Voltage Range	20.4 to 26.4 VDC		
Input Impedance	5.6 kΩ		
Input Current	4.1 mA typical (at 24 VDC)		
ON Voltage/ON Current	19.0 VDC min./3 mA min.		
OFF Voltage/OFF Current	5 VDC max./1 mA max.		
ON Response Time	8.0 ms max. (Can be set to between 0 and 32 in the Setup.) *		
OFF Response Time	8.0 ms max. (Can be set to between 0 and 32 in the Setup.) *		
Number of Circuits	64 (16 points/common, 4 circuits)		
Number of Simultaneously ON Points	50% (16 points/common) simultaneously ON (at 24 VDC) (Refer to the following illustrations.)		
Insulation Resistance	$20~\text{M}\Omega$ between external terminals and the GR terminal (100 VDC)		
Dielectric Strength	1,000 VAC between the external terminals and the GR terminal for 1 minute at a leakage current of 10 mA max.		
Internal Current Consumption	90 mA max.		
Weight	110 g max.		
Accessories	None		
Circuit Configuration	Allocated Signal CIO word name COnnector Wd Jxx_Ch1_In00 M Jxx_Ch1_In15 COMM M Jxx_Ch2_In15 COMM Connector row B COMM		
External connection and terminal-device variable diagram	Allocated CiO word name to the pin name to		

The ON response time will be 120 μs maximum and OFF response time will be 400 μs maximum even if the response times are set to 0 ms due to internal element delays.

- Note: Observe the following restrictions when connecting to a 2-wire sensor.
 Make sure the input power supply voltage is larger than the ON voltage (19 V) plus the residual voltage of the sensor (approx. 3 V).
 Use a sensor with a minimum load current of 3 mA min.

 - Connect bleeder resistance if you connect a sensor with a minimum load current of 5 mA or higher.

CJ1W-ID262 DC Input Unit (24 VDC, 64 Points)

	, , ,	
Name	64-point DC Input Unit with MIL Connector	
Model	CJ1W-ID262	
Rated Input Voltage	24 VDC	
Rated Input Voltage	00.41, 00.41/D0	
Range	20.4 to 26.4 VDC	
Input Impedance	5.6 kΩ	-
Input Current	4.1 mA typical (at 24 VDC)	
•		
ON Voltage/ON Current	19.0 VDC min./3 mA min.	
OFF Voltage/OFF Current	5 VDC max./1 mA max.	
ON Response Time	8.0 ms max. (Can be set to between 0 and 32 in the Setup.) *	
OFF Response Time	8.0 ms max. (Can be set to between 0 and 32 in the Setup.) *	
Number of Circuits	64 (16 points/common, 4 circuits)	
Number of Simultaneously	500/ (0 = -int-/	- f-IIi iII
ON Points	50% (8 points/common) simultaneously ON (at 24 VDC) (Refer to the	ne following illustrations.)
Insulation Resistance	20 M Ω between external terminals and the GR terminal (100 VDC)	
Dielectric Strength	1,000 VAC between the external terminals and the GR terminal for	1 minute at a leakage current of 10 mA max.
Internal Current		
Consumption	90 mA max.	
Weight	110 g max.	
Accessories	None	
Accessories	INOTIC	T
Circuit Configuration	Allocated Signal CIO word name Wd m Jxx_Ch1_In00	Number of Simultaneously ON Points vs. Ambient Temperature Characteristic 64 points at 25°C 64 points at 35°C 64 points at 47°C Input voltage: 20.4 VDC 12 points/common (total: 45 points) 40 points/common (total: 26 points/common (total: 26 points max.) 41 points/common (total: 26 points max.) 42 points/common (total: 26 points max.) 43 points/common (total: 26 points max.) 44 points/common (total: 26 points max.) 45 points/common (total: 26 points max.)
External connection and terminal-device variable diagram	Allocated CIO word name Connector pin name Allocated CIO word name CIO w	Allocated CIO word name tor pin name Allocated CIO word name tor pin name Allocated CIO word name CI
	The device variable names are the names that use "Jxx" as the device name.	The device variable names are the names that use "Jxx" as the device name.
* The ON response time	e will be 120 μs maximum and OFF response time will be 400	μs maximum even if the response times are set to 0 ms due

^{*} The ON response time will be 120 µs maximum and OFF response time will be 400 µs maximum even if the response times are set to 0 ms due to internal element delays.

Note: Observe the following restrictions when connecting to a 2-wire sensor.

• Make sure the input power supply voltage is larger than the ON voltage (19 V) plus the residual voltage of the sensor (approx. 3 V).

• Use a sensor with a minimum load current of 3 mA min.

• Connect bleeder resistance if you connect a sensor with a minimum load current of 5 mA or higher.

CJ1W-IA201 AC Input Unit (200 VAC, 8 Points)

Name	8-point AC Input Unit with Terminal Block		
Model	CJ1W-IA201		
Rated Input Voltage	200 to 240 VAC 50/60 Hz		
Rated Input Voltage Range	170 to 264 VAC		
Input Impedance	21 kΩ (50 Hz), 18 kΩ (60 Hz)		
Input Current	9 mA typical (at 200 VAC, 50 Hz), 11 mA typical (at 200 VAC, 60 Hz)		
ON Voltage/ON Current	120 VAC min./4 mA min.		
OFF Voltage/OFF Current	40 VAC max./2 mA max.		
ON Response Time	18.0 ms max. (default setting: 8 ms) *1		
OFF Response Time	48.0 ms max. (default setting: 8 ms) *1		
Number of Circuits	8 (8 points/common, 1 circuit)		
Number of Simultaneously ON Points	100% (8 points/common) simultaneously ON		
Insulation Resistance	20 $M\Omega$ between external terminals and the GR terminal (500 VDC)		
Dielectric Strength	2,000 VAC between the external terminals and the GR terminal for 1 minute at a leakage current of 10 mA max.		
Internal Current Consumption	80 mA max.		
Weight	130 g max.		
Accessories	None		
Circuit Configuration	Signal name Input indicator		
	Connector pin **2 Signal name NC A0 NC A1 B1 NC A2 B2 NC A3 B3 Jxx_Ch1_ln00 Jxx_Ch1_ln01 Jxx_Ch1_ln02 Jxx_Ch1_ln03 Jxx_Ch1_ln03		
External connection and terminal-device variable diagram	NC A4 B4 Jxx_Ch1_ln04		

The signal names of the terminals are the device variable names.

The device variable names are the names that use "Jxx" as the device name.

NC A8

NC A6

NC A7

В6

В7

B8

*1. Can be set to 0 ms, 0.5 ms, 1 ms, 2 ms, 4 ms, 8 ms, 16 ms, or 32ms in the settings. When the response times have been set to 0 ms, the ON response time will be 10 ms maximum and the OFF response time will be 40 ms maximum due to internal element delays.

СОМ

Jxx_Ch1_In06

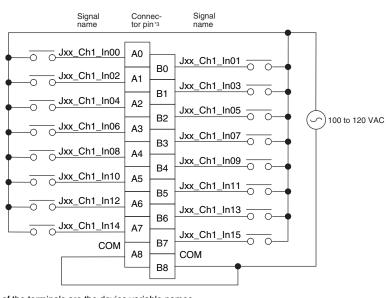
Note: Although 16 I/O bits (1 word) are allocated, only 8 of these can be used for external I/O.

^{*2.} Terminal numbers A0 to A8 and B0 to B8 are used in the external connection and terminal-device variable diagrams. They are not printed on the Units.

CJ1W-IA111 AC Input Unit (100 VAC, 16 points)

Name	16-point AC Input Unit with Terminal Block	
Model	CJ1W-IA111	
Rated input voltage	100 to 120 VAC 50/60 Hz *2	
Rated Input Voltage Range	85 to 132 VAC	
Input Impedance	14.5 kΩ (50 Hz), 12 kΩ (60 Hz)	
Input Current	7 mA typical (at 100 VAC, 50 Hz), 8 mA typical (at 100 VAC, 60 Hz)	
ON Voltage/ON Current	70 VAC min./4 mA min	
OFF Voltage/OFF Current	20 VAC max./2 mA max	
ON Response Time	18 ms max. (default setting: 8 ms) *1	
OFF Response Time	48 ms max. (default setting: 8 ms) *1	
Number of Circuits	16 (16 points/common, 1 circuit)	
Number of Inputs ON Simultaneously	100% simultaneously ON (16 points/common)	
Insulation Resistance	20 $M\Omega$ between external terminals and the GR terminal (500 VDC)	
Dielectric Strength	2,000 VAC between the external terminals and the GR terminal for 1 minute at a leakage current of 10 mA max.	
Internal Current Consumption	90 mA max.	
Weight	130 g max.	
Accessories	None	
Circuit Layout	$\begin{array}{c} \text{Signal} \\ \text{name} \\ \\ \text{Jxx_Ch1_In00} \\ \text{Jxx_Ch1_In15} \\ \text{O} \\ \text{0.22} \\ \mu \text{F} \\ \text{270} \\ \Omega \\ \text{N} \\ \text{The signal names of the terminals are the device variable names.} \\ \text{The device variable names are the names that use "Jxx" as the device name.} \\ \end{array}$	
	Signal Connec- Signal name tor pin '3 name	





- The signal names of the terminals are the device variable names.

 The device variable names are the names that use "Jxx" as the device name.
- *1. Can be set to 0 ms, 0.5 ms, 1 ms, 2 ms, 4 ms, 8 ms, 16 ms, or 32ms in the settings. When the response times have been set to 0 ms, the ON response time will be 10 ms maximum and the OFF response time will be 40 ms maximum due to internal element delays.
- *2. Use an input voltage of 90 VAC or higher when connecting 2-wire sensors.
- *3. Terminal numbers A0 to A8 and B0 to B8 are used in the external connection and terminal-device variable diagrams. They are not printed on the Units.

Bit Allocations for Input Unit

8-point Input Unit

Allocated CIO word		Cirmal name (C I/N I)
CIO	Bit	Signal name (CJ/NJ)
	00	IN0/Jxx_Ch1_In00
	01	IN1/Jxx_Ch1_In01
	:	:
	06	IN6/Jxx_Ch1_In06
Wd m	07	IN7/Jxx_Ch1_In07
(Input)	08	_
	09	_
	:	:
	14	_
	15	_

16-point Input Unit

Allocated CIO word		Cinnal name (C I/N I)
CIO	Bit	Signal name (CJ/NJ)
	00	IN0/Jxx_Ch1_In00
	01	IN1/Jxx_Ch1_In01
Wd m (Input)	:	:
(mpat)	14	IN14/Jxx_Ch1_In14
	15	IN15/Jxx_Ch1_In15

32-point Input Unit

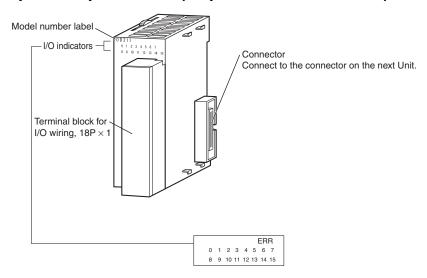
Allocated CIO word		Cianal name (C I/N I)
CIO	Bit	Signal name (CJ/NJ)
	00	IN0/Jxx_Ch1_In00
	01	IN1/Jxx_Ch1_In01
Wd m (Input)	:	:
(mpat)	14	IN14/Jxx_Ch1_In14
	15	IN15/Jxx_Ch1_In15
	00	IN0/Jxx_Ch2_In00
Wd m+1 (Input)	01	IN1/Jxx_Ch2_In01
	:	:
(put)	14	IN14/Jxx_Ch2_In14
	15	IN15/Jxx_Ch2_In15

64-point Input Unit

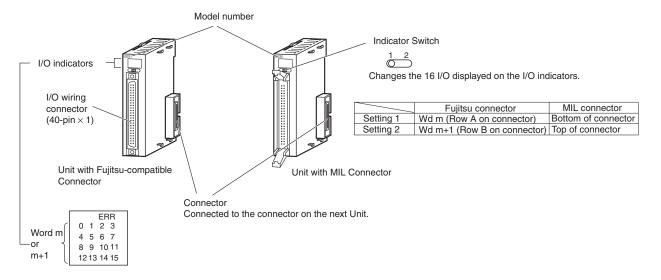
Allocated CIO word		Circulations (O.I/N.I)
CIO	Bit	Signal name (CJ/NJ)
	00	IN0/Jxx_Ch1_In00
	01	IN1/Jxx_Ch1_In01
Wd m (Input)	:	:
(pat)	14	IN14/Jxx_Ch1_In14
	15	IN15/Jxx_Ch1_In15
	00	IN0/Jxx_Ch2_In00
	01	IN1/Jxx_Ch2_In01
Wd m+1 (Input)	:	:
(pat)	14	IN14/Jxx_Ch2_In14
	15	IN15/Jxx_Ch2_In15
	00	IN0/Jxx_Ch3_In00
	01	IN1/Jxx_Ch3_In01
Wd m+2 (Input)	:	:
(input)	14	IN14/Jxx_Ch3_In14
	15	IN15/Jxx_Ch3_In15
	00	IN0/Jxx_Ch4_In00
	01	IN1/Jxx_Ch4_In01
Wd m+3 (Input)	:	:
(iiipat)	14	IN14/Jxx_Ch4_In14
	15	IN15/Jxx_Ch4_In15

External Interface

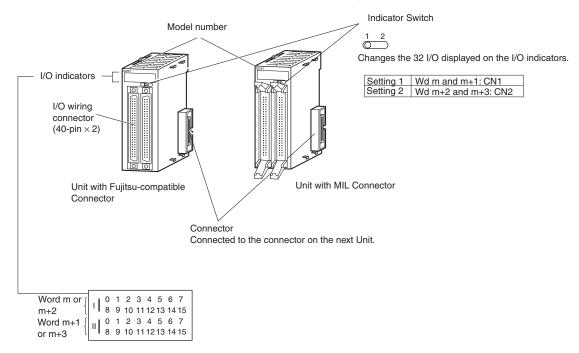
8-point/16-point Units (18-point Terminal Blocks)



32-point Units (Models with 40-point Fujitsu Connector or MIL Connector)



64-point Units (Models with Two 40-point Fujitsu Connectors or MIL Connector)



Wiring Basic I/O Units with Terminal Blocks

Electric Wires

The following wire gauges are recommended.

Terminal Block Connector	Wire Size
18-terminal	AWG 22 to 18 (0.32 to 0.82 mm ²)

Crimp terminals

Use crimp terminals (M3) having the dimensions shown below.

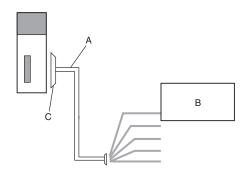


I/O Unit Wiring Methods

An I/O Unit can be connected to an external device by any of the following three methods.

1. User-provided Cable

An I/O Unit can be directly connected to an external device by using a connector.

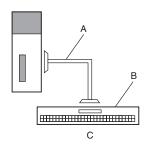


Α	User-provided cable
В	External device
С	Connector

2. Connector-Terminal Block Conversion Unit

Use a Connecting Cable to connect to a Connector-Terminal Block Conversion Unit.

Converting the I/O Unit connector to a screw terminal block makes it easy to connect external devices.

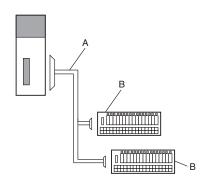


A	Connecting Cable for Connector-Terminal Block Conversion Unit XW2Z
В	Connector-Terminal Block Conversion Unit XW2R
С	Conversion to a screw terminal block

3. I/O Relay Terminal

Use a Connecting Cable to connect to an I/O Relay Terminal.

The I/O specifications can be converted to relay outputs and AC inputs by connecting the I/O Relay Terminal to an I/O Unit.



Α	G79 I/O Relay Terminal Connecting Cable
В	G7□□ I/O Relay Terminals Or, conversion to relay outputs and AC inputs.

1. Using User-made Cables with Connector

Available Connectors

Use the following connectors when assembling a connector and cable.

32- and 64-point Basic I/O Units with Fujitsu-compatible Connectors Applicable Units

Model	Specifications	Pins
CJ1W-ID231	Input Unit, 24 VDC, 32 inputs	40
CJ1W-ID261	Input Unit, 24 VDC, 64 inputs	40

Applicable Cable-side Connectors

Connection	tion Pins OMRON set		Fujitsu parts		
Solder-type	40	C500-CE404	Socket: FCN-361J040-AU Connector cover: FCN-360C040-J2		
Crimped	40	C500-CE405	Socket: FCN-363J040 Connector cover: FCN-360C040-J2 Contacts: FCN-363J-AU		
Pressure-welded	40	C500-CE403	FCN-367J040-AU/F		

32- and 64-point Basic I/O Units with MIL Connectors Applicable Units

Model	Specifications	Pins
CJ1W-ID232 CJ1W-ID233	Input Unit, 24 VDC, 32 inputs	40
CJ1W-ID262	Input Unit, 24 VDC, 64 inputs	

Applicable Cable-side Connectors

Connection	Pins	OMRON set	DDK parts
Pressure-welded 40 XG		XG4M-4030-T *1	FRC5-A040-3T0S
	40	XG5N-401 *2	HU-40OS2-001
Crimped	-	Crimp Contacts for XG5N *3 XG5W-0232 (loose contacts: 100 pieces) XG5W-0232-R (reel contacts: 10,000 pieces)	HU-111S

^{*1.} Socket and Stain Relief set.

Wire Size

We recommend using cable with wire gauges of AWG 28 to 24 (0.08 to 0.2 mm²). Use cable with external wire diameters of 1.61 mm max.

Crimping Tools

The following models are recommended for crimping tools and pressure-welding tools for Fujitsu connectors. Tools for Crimped Connectors (Fujitsu Component)

Product Name	Model
Hand Crimping Tool	FCN-363T-T005/H
Contact Withdrawal Tool	FCN-360T-T001/H

Tools for Pressure-welded Connectors (Fujitsu Component)

Product Name	Model
Hand Press	FCN-707T-T101/H
Cable Cutter	FCN-707T-T001/H
Locator Plate	FCN-367T-T012/H

The following models are recommended for tools for OMRON MIL connectors. Tools for Pressure-welded Connectors (OMRON)

Product Name	Model
Pressure-welding Tool	XY2B-0002
Attachment	XY2B-1007

Tools for Crimped Connectors (OMRON)

Product Name	Model
Manual Crimping Tool	XY2B-7007

^{*2.} Crimp Contacts (XG5W-0232) are sold separately.

^{*3.} Applicable wire size is AWG 28 to 24. For applicable conductor construction and more information, visit the OMRON website at

2. Connecting Connector-Terminal Block Conversion Units

Connection Patterns for Connector-Terminal Block Conversion Units

Pattern	Configuration	Number of connectors
A	Connecting Cable Connector-Terminal Block Conversion Unit 34 terminals	1
В	Connecting Cable Connector-Terminal Block Conversion Unit 34 terminals 34 terminals	2

Combination of I/O Units with Connector-Terminal Block Conversion Units

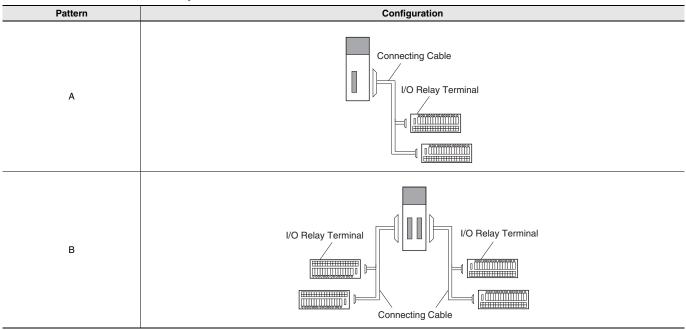
Unit	I/O capacity	Number of connectors	Polarity	Connection pattern	Connecting Cable	Connector-Terminal Block Conversion Unit	Wiring method	Common terminals	
						XW2R-J34G-C1	Phillips screw		
CJ1W-ID231	32 inputs	1 Fujitsu connector	NPN/PNP	Α	XW2Z-□□□B	XW2R-E34G-C1	Slotted screw (rise up)	No	
						XW2R-P34G-C1	Push-in spring		
						XW2R-J34G-C2	Phillips screw		
CJ1W-ID232	32 inputs	1 MIL connector	NPN/PNP	Α	XW2Z-□□□K	XW2R-E34G-C2	Slotted screw (rise up)	No	
				X		XW2R-P34G-C2	Push-in spring		
						XW2R-J34G-C2	Phillips screw		
CJ1W-ID233	32 inputs	1 MIL connector	NPN/PNP	Α	XW2Z-□□□K	XW2R-E34G-C2	Slotted screw (rise up)	No	
						XW2R-P34G-C2	Push-in spring		
						XW2R-J34G-C1 (2 Units)	Phillips screw		
CJ1W-ID261	64 inputs	2 Fujitsu connectors	NPN/PNP	В	XW2Z-□□□B (2 Cables)	XW2R-E34G-C1 (2 Units)	Slotted screw (rise up)	No	
					(2 000.00)	XW2R-P34G-C1 (2 Units)	Push-in spring		
						XW2R-J34G-C2 (2 Units)	Phillips screw		
CJ1W-ID262	64 inputs	2 MIL connectors	NPN/PNP	В	XW2Z-□□□K (2 Cables)	XW2R-E34G-C2 (2 Units)	Slotted screw (rise up)	No	
					(- 3.3.2.7)	XW2R-P34G-C2 (2 Units)	Push-in spring		

Types of Connecting Cables

Appearance	Connectors	Model	Cable lenght [m]
XW2Z-□□□B		XW2Z-050B	0.5
		XW2Z-100B	1
	One 40-pin Connector Made by Fujitsu Component, Ltd. to One 40-pin MIL Connector	XW2Z-150B	1.5
		XW2Z-200B	2
		XW2Z-300B	3
		XW2Z-500B	5
XW2Z-□□□K	One 40-pin MIL Connector to One 40-pin MIL Connector	XW2Z-C50K	0.5
		XW2Z-100K	1
		XW2Z-150K	1.5
		XW2Z-200K	2
		XW2Z-300K	3
		XW2Z-500K	5

3. Connecting I/O Relay Terminals

Connection Patterns for I/O Relay Terminals



Combination of I/O Units with I/O Relay Terminal and Connecting Cables

Model	I/O points	Number of connectors	Polarity	Connection pattern	Number of branches	Connecting Cable	I/O Relay Terminal			
CJ1W-ID231	32 inputs	1 Fujitsu	NPN	Α	2	G79-I□C-□	G7TC-ID16			
C3174-1D231	32 iriputs	connector	INFIN	Α	2	G79-I□C-□	G7TC-IA16			
C HW IDooo	20 innute	1 MIL compactor	NPN	Α	2	G79-O□-□-D1	G7TC-ID16			
CJ1W-ID232 32 inputs	1 MIL connector	INPIN	Α	2	G79-O□-□-D1	G7TC-IA16				
CJ1W-ID233 32 inputs	00 :	1 MIL connector	4 MIL	1 MIL connector	NPN	Α	2	G79-O□-□-D1	G7TC-ID16	
	32 inputs		INPIN	Α	2	G79-O□-□-D1	G7TC-IA16			
O HAW IDOO!	04 in	4 inputs 2 Fujitsu connectors	NDN	В	2	G79-I□C-□	G7TC-ID16			
CJ1W-ID261 64 input	conr		connectors	connectors	NPN	В	2	G79-I□C-□	G7TC-IA16	
O HAW IDOOD	04 in a set	2 MIL	NDN	В	2	G79-O□-□-D1	G7TC-ID16			
CJ1W-ID262 64	64 inputs	64 inputs	64 inputs	64 inputs	connectors	NPN	В	2	G79-O□-□-D1	G7TC-IA16

Types of Connecting Cables

	•					
Cable lenght	G79-□C	G79-I□C	G79-I□C-□	G79-O□C	G79-O□C-□	G79-O□-□-D1
0.25m	-	G79-I25C	-	G79-O25C	-	-
0.5m	-	G79-I50C	-	G79-O50C	-	G79-O50-25-D1
1.0m	G79-100C	-	G79-I100C-75	-	G79-O100C-75	G79-O75-50-D1
1.5m	G79-150C	-	G79-I150C-125	-	G79-O150C-125	-
2.0m	G79-200C	-	G79-I200C-175	-	G79-O200C-175	-
3.0m	G79-300C	-	G79-I300C-275	-	G79-O300C-275	-
5.0m	G79-500C	-	G79-I500C-475	-	G79-O500C-475	-

Dimensions (Unit: mm)

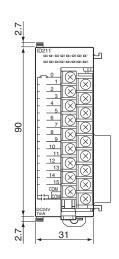
8-point/16-point Units (18-point Terminal Blocks)

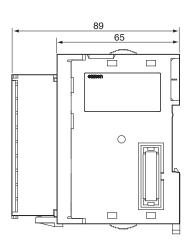
CJ1W-ID201 CJ1W-ID211 CJ1W-ID212

CJ1W-IA201

CJ1W-IA111



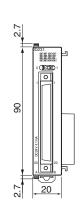


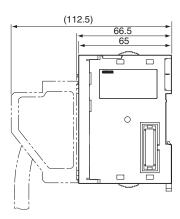


32-point Units (Input Units)

With Fujitsu-compatible Connector (40-pin \times 1) CJ1W-ID231

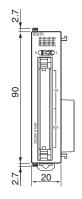


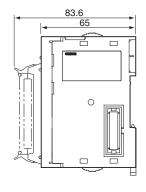




With MIL Connector (40-pin \times 1) CJ1W-ID232 CJ1W-ID233



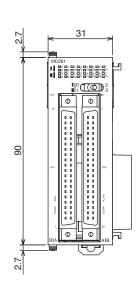


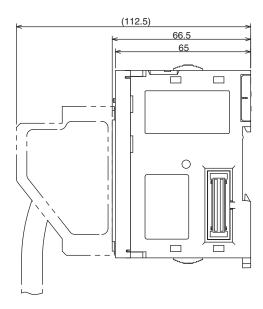


64-point Units (Input Units)

With Fujitsu-compatible Connector (40-pin \times 2) CJ1W-ID261

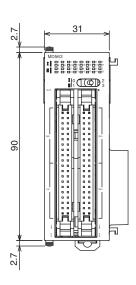


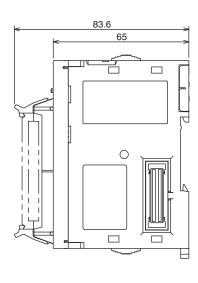




With MIL Connector (40-pin \times 2) CJ1W-ID262







Related Manuals

Name	Cat. No.	Contents
CJ-series CJ2 CPU Unit Hardware User's Manual CJ2H-CPU6□-EIP CJ2H-CPU6□ CJ2M-CPU□□	W472	Describes the following for CJ2 CPU Units: Overview and features Basic system configuration Part nomenclature and functions Mounting and setting procedure Remedies for errors Also refer to the Software User's Manual (W473).
SYSMAC CJ Series CJ1H-CPU H-R, CJ1G/H-CPU H, CJ1G-CPU P, CJ1G-CPU CJ1M-CPU Programmable Controllers Operation Manual	W393	Provides an outlines of and describes the design, installation, maintenance, and other basic operations for the CJ-series PLCs.
NJ-series CPU Unit Hardware User's Manual NJ501-	W500	An introduction to the entire NJ-series system is provided along with the following information on a Controller built with an NJ501 CPU Unit. • Features and system configuration • Introduction • Part names and functions • General specifications • Installation and wiring • Maintenance and inspection Use this manual together with the NJ-series CPU Unit Software User's Manual (Cat. No. W501).

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