CJ-series Input Units CJ1W-ID/IA

CSM_CJ1W-ID_IA_DS_E_11_7

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-ID212



CJ1W-ID233

Features

- High-speed input models are available, meeting versatile applications. ON Response Time: 15 μ s, OFF Response Time: 90 μ s
- 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

Unit turns	Product name		SI	Current consumption (A)		Madal	Standarda			
onin type		I/O points	Input voltage and current	Commons	External connection	No. of words allocated	5 V	24 V	Model	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	80.0	-	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	
		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*.

CJ1W-ID/IA

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
40-pin Connectors	Soldered	FCN-361J040-AU Connector FCN-360C040-J2 Connector Cover	Fujitsu Connectors: CJ1W-ID231(32 inputs): 1 per Unit	C500-CE404	
	Crimped	FCN-363J040 Housing FCN-363J-AU Contactor FCN-360C040-J2 Connector Cover	CJ1W-ID261 (64 inputs): 2 per Unit CJ1W-OD231 (32 outputs):1 per Unit CJ1W-OD261 (64 outputs): 2 per Unit CJ1W-OD261 (32 inputs, 32 outputs): 2 per Unit	C500-CE405	-
	Pressure welded	FCN-367J040-AU/F		C500-CE403	
24-pin Connectors	Soldered	FCN-361J024-AU Connector FCN-360C024-J2 Connector Cover		C500-CE241	
	Crimped	FCN-363J024 Socket FCN-363J-AU Contactor FCN-360C024-J2 Connector Cover	Fujitsu Connectors: CJ1W-MD231 (16 inputs, 16 outputs): 2 per Unit	C500-CE242	
	Pressure welded	FCN-367J024-AU/F		C500-CE243	1

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*	-
* Crime Contor	to are also required	Defer to name 00 for date	ile.		

⁶ Crimp Contacts are also required. Refer to page 20 for details.

Applicable Connector-Terminal Block Conversion Units

	Number		Wiring	Wiring	Wiring Terminal	Size		Mounting		Common	Bleeder				
Туре	Series	of poles	method	type	Depth (mm)	Height (mm)	Width (mm)	DIN Track	Screws	terminals	resistance	Indicators	I/O Units	Model *	Standards
			Phillips screw										CJ1W-ID231 CJ1W-ID261	XW2R-J34GD-C1	
			State State State	M3	50	48.05	130.7						CJ1W-ID232 CJ1W-ID233 CJ1W-ID262	XW2R-J34GD-C2	
PLCs XW2F			Slotted screw (rise up)	МЗ				Yes	No	No	No	No	CJ1W-ID231 CJ1W-ID261	XW2R-E34GD-C1	
	XW2R	34		(European type)	50	44.81	98.5						CJ1W-ID232 CJ1W-ID233 CJ1W-ID262	XW2R-E34GD-C2	-
			Push-in spring										CJ1W-ID231 CJ1W-ID261	XW2R-P34GD-C1	1
				Clamp	50	44.81	98.5						CJ1W-ID232 CJ1W-ID233 CJ1W-ID262	XW2R-P34GD-C2	

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

* Representative models only. For details, refer to the XW2R series catalog (Cat. No. G077).

Connecting Cables for Connector-Terminal Block Conversion Units

Appearance	Connectors	Cable lenght [m]	Model
XW2Z-		0.5	XW2Z-050PF
		1	XW2Z-100PF
	One 40 pin Euliteu Connector te One 40 pin MIL Connector	1.5	XW2Z-150PF
	One 40-pin rujusu connector to One 40-pin Mile connector	2	XW2Z-200PF
		3	XW2Z-300PF
		5	XW2Z-500PF
XW2Z-		0.5	XW2Z-050PM
		1	XW2Z-100PM
	One 40 pin MIL Connector to One 40 pin MIL Connector	1.5	XW2Z-150PM
	One 40-pin Mill Connector to One 40-pin Mill Connector	2	XW2Z-200PM
		3	XW2Z-300PM
		5	XW2Z-500PM

		Specifications							Size (horizontal mounting) Mounting					
Туре	Series	Classification		Polarity	Number of points	Rated ON current at contacts	Rated voltage	Horizontal (mm)	Vertical (mm)	Height (mm)	DIN Track	Screws	Model	Standards
		1		NPN									G70V-SID16P *4	
		Innuto	DC inputs	PNP	16	50 m A							G70V-SID16P-1 *4	-
Pueb-In	G70V	inputs		NPN	(SPSTNO × 16)	50 MA							G70V-SID16P-C16 *5	
Plus	MILLION CONTRACTOR			PNP				1/2	90	56	Vac	Voc	G70V-SID16P-1-C16 *5	UC, CE
terminal				NPN			24 000	140	30		103	163	G70V-SOC16P *4	certified)
DIOCK		Outputs	Relay	PNP	NP 16	6 A/point, 10 A/							G70V-SOC16P-1 *4	_
			outputs	NPN	(SPDT × 16)	common							G70V-SOC16P-C4 *6	-
				PNP								G70V-SOC16P-1-C4 *6	L	
			AC				100/(110) VAC	-					G7TC-IA16 AC100/110	-
G7TC Standard		inputs		16		200/(220) VAC	-					G7TC-IA16 AC200/220	-	
		Inputs	DC inputs	NPN	(SPSTNO × 16)	1A	12 VDC	182			Yes	No	G7TC-ID16 DC12	U, C
	G7TC						24 VDC	-					G7TC-ID16 DC24	
							100/110 VDC		05	69			G7TC-ID16 DC100/110	
	A DAMAGE AND				8 (SPSTNO × 8)			102	65	00			G7TC-0C08 DC12	
	AND DAY			NPN			12 VDC		-				G7TC-0C16 DC12	
		Outputs	Relay outputs		16 (SPSTNO × 16)	5A	12 VDC	-					G7TC-0C16 DC12	-
					10		12 VDC	182					G7TC-0C16-1 DC12	-
				PNP	(SPSTNO × 16)		24 VDC	-					G7TC-0C16-1 DC24	-
G70A *1 (Socket o	G70A *1 (Socket only)	Inputs	Relay inputs	NPN/ PNP	16 (SPDT × 16	100 mA	110 VDC max., 240 VAC max. *2	- 234	75	64	Yes	No	G70A-ZOC16-5	U, C, CE (VDE certified)
capacity socket		Outputs	utputs Relay	NPN	possible with G2R Relays)	10 A (Ter- minal	234 24 VDC						G70A-ZOC16-3	
	C. C. C. MIL	Outputs	outputs	PNP		lowable							G70A-ZOC16-4	
	Vertical type G70D-V	Relay outputs				5 A or 3 A *3							G70D-VSOC16	
			MOSFET relay outputs	NPN	16 (SPSTNO × 16)	0.3 A		135	46	81	Yes	Yes	G70D-VFOM16	(VDE certified)
Space-	Flat type G70D	Outputs			8 (SPSTNO × 8)	5 A	24 VDC	68	93	44			G70D-SOC08	
Saving	Milling		Relay outputs	INFIN	16 (SPSTNO × 16)	3 A							G70D-SOC16	
	CELEVER .			PNP	16 (SPSTNO × 16)	3 A		156	51	39	Yes	Yes	G70D-SOC16-1	_
			MOSFET	NPN	N 16	034			51	39			G70D-FOM16	
	THILLE		outputs	PNP	(SPSTNO × 16)	0.3 A							G70D-FOM16-1	
High- capacity, space- saving	G70R	Outputs	Relay outputs	NPN	8 (SPSTNO × 8)	10 A	24 VDC	136	93	55	Yes	Yes	G70R-SOC08 *7	-

Applicable I/O Relay Terminals

*1. G70A is a I/O terminal socket product. Relay is not provided with the socket. Be sure to order a relay, timer separately.

*2. Each relay to be mounted must incorporate a coil that has proper specifications within the maximum rated voltage range.
*3. Eight or fewer points ON: 5 A, Nine or more points ON: 3 A.

*4. Internal common at terminal block: No internal connections

*5. Internal common at terminal block: Internal IO common 16 points internally connected

*6. Internal common at terminal block: Every 4 points internally connected at terminal block middle row.

*7. Product no longer available to order.
Note: 1. For the combination of Input Units with I/O Relay Terminal and Connecting Cables, refer to 3. Connecting I/O Relay Terminals. 2. Please refer to each Datasheet about details.

3. When the G7TC is used with an AC rated voltage, three rated currents can be used. If a coil voltage of 110 or 220 VAC is used, 50 Hz cannot be used.

Cables for I/O Relay Terminals

Туре	Name	I/O Classification	Appearance	Cable leng	gth L (mm)	Models
			A side B side	1,0	000	XW2Z-R100C
	Cables with Connectors (1:1) XW2Z-R□C	16 I/O points	Device end I/O Relay Terminal	1,5	500	XW2Z-R150C
Fujitsu connectors (24 pins)				2,0	000	XW2Z-R200C
				3,000		XW2Z-R300C
			L	5,000		XW2Z-R500C
				(A) 1,000	(B) 750	XW2Z-RI100C-75
			A side B side	(A) 1,500	(B) 1,250	XW2Z-RI150C-125
		32 input points	Device end I/O Relay Terminal	(A) 2,000	(B) 1,750	XW2Z-RI200C-175
	Cables with Connectors			(A) 3,000	(B) 2,750	XW2Z-RI300C-275
Fujitsu connectors (40 pins)	(1:2)			(A) 5,000	(B) 4,750	XW2Z-RI500C-475
	XW2Z-RI□C-□			(A) 1,000	(B) 750	XW2Z-RO100C-75
	XW2Z-RO□C-□	32 output points		(A) 1,500	(B) 1,250	XW2Z-RO150C-125
			(B)	(A) 2,000	(B) 1,750	XW2Z-RO200C-175
			Straight length (without bends)	(A) 3,000	(B) 2,750	XW2Z-RO300C-275
				(A) 5,000	(B) 4,750	XW2Z-RO500C-475
	Cables with Connectors		A side B side	25	50	XW2Z-RI25C
	(1:1) XW2Z-RI□C XW2Z-RO□C	16 I/O points	Device end I/O Relay Terminal	50	00	XW2Z-RI50C
MIL connectors (20 pins)				250		XW2Z-RO25C
			L	50	00	XW2Z-RO50C
				(A) 500	(B) 250	XW2Z-RO50-25-D1
				(A) 750	(B) 500	XW2Z-RO75-50-D1
				(A) 1,000	(B) 750	XW2Z-RO100-75-D1
			A side B side	(A) 1,500	(B) 1,250	XW2Z-RO150-125-D1
			Device end I/O Relay Terminal	(A) 2,000	(B) 1,750	XW2Z-RO200-175-D1
	Cables with Connectors		(A)	(A) 3,000	(B) 2,750	XW2Z-RO300-275-D1
MIL connectors (40 pips)	(1:2)	32 I/O points		(A) 5,000	(B) 4,750	XW2Z-RO500-475-D1
	XW2Z-RO□-□-D1,	52 //O points		(A) 500	(B) 250	XW2Z-RI50-25-D1
	XW2Z-RI□-□-D1			(A) 750	(B) 500	XW2Z-RI75-50-D1
			(B)	(A) 1,000	(B) 750	XW2Z-RI100-75-D1
			Straight length (without bends)	(A) 1,500	(B) 1,250	XW2Z-RI150-125-D1
				(A) 2,000	(B) 1,750	XW2Z-RI200-175-D1
				(A) 3,000	(B) 2,750	XW2Z-RI300-275-D1
				(A) 5,000	(B) 4,750	XW2Z-RI500-475-D1

Note: Refer to the Datasheet for the XW2Z-R Cables for I/O Relay Terminals (Cat. No. G126).

Mountable Racks

	NJ sy	vstem	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	10 Units (per Expansion Backolane)
CJ1W-ID212		10 Units					
CJ1W-ID231							
CJ1W-ID232	10 Unito						
CJ1W-ID233	TO Office	(per Expansion Rack)					
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	I0 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	3.0 ms max. (Can be set to between 0 and 32 ms in the Setup.) *1								
OFF Response Time	3.0 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	00% simultaneously ON								
Insulation Resistance	20 M Ω min. 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 → → → → → → → → → → → → → → → → → → →								
External connection and terminal-device variable diagram	 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 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.

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

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	14.4 VDC min./3 mA min.							
OFF Voltage/OFF Current	5 VDC max./1 mA max.							
ON Response Time	.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 min. 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 to Jxx_Ch1_In15 COM COM COM COM Com Com to to to to to to to to to to							
External connection and terminal-device variable diagram	 Signal connector Signal name pin :2 Signal pin :2 Signal name Signal pin :2 Signal pin :2 Signal name Signal pin :2 Signal pin :							

*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)

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	0.0 ms max. Can be set to between 0 and 32 ms in the Setup.) *1							
OFF Response Time	3.0 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 min. 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	Signal $A = 0$							
External connection and terminal-device variable diagram	 Signal name pin -2 Signal name Signal pin -2 Signal name Signal pin -2 Signal name 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	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	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 min. 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							
Circuit Configuration	Allocated Signal Connector row A Connector row B Connector row B Connector Conne							
External connection and terminal-device variable diagram	Signal Connec-Signal name for pin name Clowerd							

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

Name	32-point DC Input Unit with MIL Connector		
Model	CJ1W-ID232		
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	32 (16 points/common, 2 circuits)		
ON Points	75% (12 points/common) simultaneously ON (at 24 VDC) (Refer to the following illustration.)		
Insulation Resistance	20 M Ω min. 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		
Circuit Configuration	Allocated Signal Connector row A Connector row A Connector row A Connector row B Connector row B Connector Connector row B Connector row B Connector		
External connection and terminal-device variable diagram	Allocated Clowerd Signal Congect Signal Congect Signal Clowerd Clow		
	 Be sure to wire both pins 3 and 4 (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. 		

* 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)

Name	32-point DC Input Unit with MIL Connector	
Model	CJ1W-ID233	
Rated Input Voltage	24 VDC	
Rated Input Voltage Range	20.4 to 26.4 VDC	
Input Impedance		
ON Voltage/ON Current		
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 min. 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.	
Consumption	200 mA max.	
Veight	70 g max.	
Accessories		
Circuit Configuration	Allocated CIO word Name Connector row B Connector row B Connector row B Connector row B Connector row B Connector row B Connector To b 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	Allocated CIO word CIO word CIO word CIO word Allocated CIO word CIO word Widm+1 CIO word Widm+1 CIO word Widm+1 CIO word Widm+1 CIO word Widm+1 CIO word CIO	

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

Nome Original Control Control Control Control Number of prior Control Contro Control Contrel Control Contro Contrel Control Control Control Co	Nama	64 paint DC Input Linit with Ewitter Connector	
Model C/IV/U261 Reade input Votage Imp 24 VDC Reade input Votage Imp 24 VDC Input Content 54 AL Input Content 56 AL Input Content 50 AL	Name		
Reted input Votinge 24 VDC Reted input Votinge 24 VDC input Impetance 53 64 VDC input Impetance 53 64 VDC Input Impetance 53 64 VDC Input Impetance 54 VDC min.37 mA ma. OPF VotingeDFC transmit 54 VDC min.37 mA ma. OPF Response Time 84 VDC min.37 mA ma. OPF Response Time 94 VDC min.37 mA ma. OPF Response Time 95 VDC min.37 mA ma. Detective Strenge VDC min.37 mA ma. OPF Response Time 95 VDC min.37 mA ma. Detective Strenge	Model	CJ1W-ID261	
Relet fund intodance fund fund introdance fund fund introdance fund 1 And National Amman. OFF ValageOFE Corrent 1 B 0 VOC max 1 mA max. DO F Sponse Time B 0 mm max. (Can be set to between 0 and 32 in the Satup.)* B 0 mm max. (Can be set to between 0 and 32 in the Satup.)* DFF Response Time B 0 mm max. (Can be set to between 0 and 32 in the Satup.)* DFF Response Time B 0 mm max. (Can be set to between 0 and 32 in the Satup.)* DFF Response Time B 0 mm max. (Can be set to between 0 and 32 in the Satup.)* DFF Response Time B 0 mm max. (Can be set to between 0 and 32 in the Satup.)* DFF Response Time B 0 mm max. (Can be set to between 0 and 32 in the Satup.)* DFF Response Time B 0 mm max. Do Ma max. Developing the set to between 0 and 32 in the Satup.)* DFF Response Time B 0 mm max. Developing the set to between 0 and 32 in the Satup.)* DFF Response Time B 0 mm max. Developing the set to between 0 and 32 in the Satup.)* DFF Response Time DFF R	Rated Input Voltage	24 VDC	
Input Impetance 5 kit is Input Current 4.1 mk Appeal (d2 24 VDC) ON Response Time 5 VDC max.2 mA max. ON Response Time 8.0 mm max. (Can be set to between 0 and 32 m the Setup.)* ON Response Time 8.0 mm max. (Can be set to between 0 and 32 m the Setup.)* Number of Circuita 8.0 mm max. (Can be set to between 0 and 32 m the Setup.)* Number of Circuita 8.0 mm max. (Can be set to between 0 and 32 m the Setup.)* Accessories 20 MA cinc. (Can be set to between 0 and 32 m the Setup.)* Accessories 20 MA cinc. (Can be set to between 0 and 32 m the Setup.)* Disterict Strength 1.00 VAC between texternal terminals and the GH terminal (tor VDC) Disterict Strength 1.00 VAC between texternal terminals and the GH terminal (tor VDC) Disterict Strength 1.00 VAC between texternal terminals and the GH terminal (tor VDC) Disterict Strength 1.00 VAC between texternal terminals and the GH terminal (tor VDC) Disterict Strength 1.00 g max. Accessories None Circuit Configuration None Great Configuration The device and the terminal term	Rated Input Voltage Range	20.4 to 26.4 VDC	
Input Current 4. If A typical (cl. 24 VDO) OFF VollageOFF Current 18.0 VDC max./1 mA max. OFF VollageOFF Current 80 ms max. (Can be set to between 0 and 32 m the Satup.)* OFF Response Time 80 ms max. (Can be set to between 0 and 32 m the Satup.)* OFF FollageOFF Current 80 (file pointscommon. 4 can be set to between 0 and 32 m the Satup.)* Number of Circuits 86 (file pointscommon. 4 can be set to between 0 and 32 m the Satup.)* Def Response Time 80 (file pointscommon.) OFF VoltageOFF Current 90 (file pointscommon.) Defector Strength 90 (file pointscommon.) Defector Strength 1.000 VPC Detector the external terminals and the GR terminal (file VPC) Defector Strength 1000 VPC Detector the external terminals and the GR terminal (file VPC) Defector Strength 1000 VPC Detector the external terminals and the GR terminal (file to the following illustrations). Circuit Configuration None Circuit Configuration File again arres of the terminal terminals and the GR terminal (file to the following illustrations). Vergint None Circuit Configuration File again arres of the terminal termi	Input Impedance	5.6 kΩ	
ON VallageOR Current 10 a VDC mm./S nA ma. OF FieldsgeOR Current 10 a max. (Can be as to between 0 and 2 m in the Setup.)* OF Response Time 4.0 m m.xc. (Can be as to between 0 and 2 m in the Setup.)* Momber of Simulation 4.0 m m.xc. (Can be as to between 0 and 2 m in the Setup.)* Momber of Circuits 4.0 m m.xc. (Can be as to between 0 and 2 m in the Setup.)* Momber of Simulation 50 M K min. between o stema 1 m min.s and the GR terminal (for UDC) Dielectric Strength 1.00 U/A between the external terminals and the GR terminal for 1 minute at a textage current of 10 mA max. Internal Current 00 M K max. Accessories None Circuit Configuration 00 m A max. Veright 110 g max. Accessories None Circuit Configuration 10 m A max. Veright 10 g max. Accessories None Circuit Configuration 10 m A max. Veright 10 g max. Accessories None Circuit Configuration No Veright No Circuit Configuration No Veright No Veright No	Input Current	4.1 mA typical (at 24 VDC)	
OFF Valuesport Furmi V VOC max/1 mA max. OF Response Time 40 m max. Cam be as to between 0 and 32 m the Setup.)* OFF Response Time 40 m max. Cam be as to between 0 and 32 m the Setup.)* Number of Simulanoouthy 64 (16 points/common, 4 circuits) Sole (16 points/common, 4 circuits) 50 (16 points/common, 4 circuits) Sole (16 points/common, 4 circuits) 50 (16 points/common, 4 circuits) Sole (16 points/common, 4 circuits) 50 (16 points/common, 4 circuits) Sole (16 points/common, 4 circuits) 50 (16 points/common, 4 circuits) Sole (16 points/common, 4 circuits) 50 (16 points/common, 4 circuits) Sole (16 points/common, 4 circuits) 50 (16 points/common, 4 circuits) Sole (16 points/common, 4 circuits) 50 (16 points/common, 4 circuits) Sole (16 points/common, 4 circuits) 50 (16 points/common, 4 circuits) Circuit Configuration 100 m Amax. Veight 110 mA max. Veight 110 max. Circuit Configuration 100 mix (a circuit a circuits) Veight 110 max. Veight 110 max. Veight 110 max. Veight 100 max. Veight 100 max.	ON Voltage/ON Current	19.0 VDC min./3 mA min.	
ON Response Time 60 ms max. (Can be as to between 0 and 32 m the Setup.)* OPE Response Time 60 ms max. (Can be as to between 0 and 32 m the Setup.)* Humber of Simulation 50 ms max. (Can be as to between 0 and 32 m the Setup.)* Humber of Simulation 50 ms max. (Can be as to between 0 and 32 m the Setup.)* Humber of Simulation 50 ms max. (Can be as to between 0 and 32 m the Setup.)* Humber of Simulation 50 ms max. Delectric Strength 1000 VAC between the external terminals and the GR terminal for 1 minute at a leakage ournent of 10 mA max. Height 1100 g max. Accessories None Circuit Configuration Ope of an an ax. Important of a max. Height and a dift and a bar and the above and the interval terminal terminal terminals and the GR terminal for 1 minute at a leakage ournent of 10 mA max. Height and a dift and a bar and a max. Important of a max. Interval Ope of a max. Important of a max. Interval Ope of a max. Important of a max. Interval Ope of a max. Important of a max. Important of a max. Interval Ope of a max. Important of a max. Important of a max. Interval Ope of a max. Important of a max.	OFF Voltage/OFF Current	5 VDC max./1 mA max.	
OFF Registries Time 10 mm max. (Can be set to between 0 and 32 in the Setup.)* Number of Circuits 64 (16 pointscommon, 4 circuits) ONE Registries Time 10 mm max. (Can be set to between 0 and 32 in the Setup.)* ONE Registries Time 20 MX min. between external leminals and the GR terminal (100 VOC) Detected Extrength 100 VAC between the external leminals and the GR terminal for 1 minute at a leakage current of 10 mA max. Organization 90 mA max. Immunol (100 VAC) Detected Extrength 100 grass. Accessories None Circuit Configuration Immunol (100 MA max. Immunol (100 MA max. Velgipt 110 grass. Immunol (100 MA max. Immunol (100 MA max. Circuit Configuration Immunol (100 MA max. Immunol (100 MA max. Immunol (100 MA max. Velgipt 110 grass. Immunol (100 MA max. Immunol (100 MA max. Immunol (100 MA max. Velgipt 110 grass. Immunol (100 MA max. Immunol (100 MA max. Immunol (100 MA max. Immunol (100 MA max. Velgipt 100 grass. Immunol (100 MA max. Immunol (100 MA max. Immunol (100 MA max. Immunol (100 MA max. Circuit Configuration Immunol (100 MA max.	ON Response Time	8.0 ms max. (Can be set to between 0 and 32 in the Setup.) *	
Outcome of the second	OFF Besponse Time	8.0 ms max. (Can be set to between 0 and 32 in the Setup.)*	
Number of the particular bandward Operation of the bandward	Number of Circuits	64 (16 points/common 4 circuits)	
ON Point Sole: (15 points/common) simultaneously ON (at 24 VDC) (Refer to the following illustrations.) Insulation Residence 20 MA max. Insulation Residence 30 MA max. Veight 10.00 VAC between the external terminals and the GR terminal for 1 minute at a leakage current of 10 mA max. Veight 10 g max. Recessories None Circuit Configuration Image: Sole: Sol	Number of Simultaneously		
Insulation Resistance 20 MG min. between external terminals and the GR terminal (100 VCC) Detecting Strangth 10.000 VAC between the external terminals and the GR terminal for 1 minute at a leakage current of 10 mA max. Weight 110 g max. Accessories None Circuit Configuration Image of the terminal terminals and the GR terminal for 1 minute at a leakage current of 10 mA max. Weight 110 g max. Accessories None Circuit Configuration Image of the terminal terminals and the GR terminal for 1 minute at a leakage current of 10 mA max. Weight 110 g max. Accessories None Circuit Configuration Image of the terminal terminals and the GR terminal for 1 minute at a leakage current of 10 mA max. The decide variable rames at the action variable rames. Image of the terminal termina	ON Points	50% (16 points/common) simultaneously ON (at 24 VDC) (Refer to t	the following illustrations.)
Deletering Strangth 1.000 VAC between the external terminals and the GA terminal for 1 minute at a leakage current of 10 mA max. Internal Current of 10 mA max. More Accessories None Circuit Configuration One more the antennal terminals and the GA terminal for 1 minute at a leakage current of 10 mA max. More One more the antennal terminals and the GA terminal for 1 minute at a leakage current of 10 mA max. Accessories None Circuit Configuration One more the antennal terminals and the GA terminal for 1 minute at a leakage current of 10 mA max. The declaration formation of the terminal for 1 minute at a leakage current of 10 mA max. One more the max is the declaration of the terminal formation of the t	Insulation Resistance	20 M Ω min, between external terminals and the GR terminal (100 VI	DC)
Internal Coursell Consumption 90 mA max. Velaphi Accessories 110 g max. Creati Configuration Image: Consumption of the state of the st	Dielectric Strength	1,000 VAC between the external terminals and the GR terminal for 1	I minute at a leakage current of 10 mA max.
Consumption 00 mA max. Recessories None Circuit Configuration Image: Consumption for the state of the terminals are the device validate names. Image: Consumption for the state of the terminals are the device validate names. Circuit Configuration Image: Consumption for the state of the terminals are the device validate names. Image: Consumption for the state of the terminals are the device validate names. External ionname/lio Image: Consumption for the state of the terminals are the device validate names. Image: Consumption for the state of the terminals are the device validate names. External ionname/lio Image: Consumption for the state of the terminals are the device validate names. Image: Consumption for the state of the terminals are the device validate names. External ionname/lio Image: Consumption for the device validate names. Image: Consumption for the device validate names. Image: Consumption for the device validate names. Image: Consumption for the device validate names. Image: Consumption for the device validate names. Image: Consumption for the device validate names. Image: Consumption for the device validate names. Image: Consumption for the device validate names. Image: Consumption for the device validate names. Image: Consumption for the device validate names. Image: Consumption for the device validate names. Image: Consumption for the devi	Internal Current		
Veright 110 g max. Accessories None Creait Configuration Accessories Accessories Accessories Creait Configuration Accessories Accessories Accessories Accessories Creait Configuratis Acce	Consumption	90 mA max.	
Accessionles None Creati Configuration Marcine Structure of Structure d'Structure d'Structu	Weight	110 g max.	
External connection variable diagram Changed from the stand st	Accessories	None	
External connection and terminal-device wariable diagram	Circuit Configuration	Allocated Signal Clo word name Solution of the terminals are the device variable names. The device variable names are the names that use "Jxx" as the device name.	Number of Simultaneously ON Points vs. Ambient Temperature Characteristic 64 points at 64 points at 35°C for points at 47°C 12 points/common 12 points/common 12 points/common 12 points/common 13 points/common 14 points/common 15 points/co
	External connection and terminal-device variable diagram	Allocated CIO word NC BI9 A19 NC BI9 A19 NC CMIL B17 A17 O O O O O O O O O O O O O O O O O O O	Allocated ClO word ClO word Allocated ClO word Allocated Cod word Allocated

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)



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 Ω min. 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 Jxx_Ch1_Ino0 Jxx_Ch1_Ino0 Jxx_Ch1_Ino7 Input indicator 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	 Connector pin 2 Signal name NC A0 B0 Jxx_Ch1_In00 0 NC A1 B1 Jxx_Ch1_In01 0 NC A2 B2 Jxx_Ch1_In02 0 NC A3 B3 Jxx_Ch1_In03 0 NC A4 B4 Jxx_Ch1_In04 0 NC A5 B5 Jxx_Ch1_In05 0 NC A6 B6 Jxx_Ch1_In05 0 NC A6 B6 Jxx_Ch1_In07 0 NC A8 B8 0 	

*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 55 ms maximum 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.

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

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 Ω min. 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	• 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 connector pinto Signal name Jxx_Ch1_In00 A0 A0 A1 B1 Jxx_Ch1_In03 Jxx_Ch1_In03 Jxx_Ch1_In04 B2 Jxx_Ch1_In05 Jxx_Ch1_In05 Jxx_Ch1_In06 A3 B3 Jxx_Ch1_In07 Jxx_Ch1_In09 Jxx_Ch1_In10 A6 B6 Jxx_Ch1_In10 B7 COM B8 A8 A9 A8 A8 A8 A8 A8 A8 A8 A8 A9 A9		

*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 55 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		Circul 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		Signal name (C 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

64-point Input Unit

Allocated CIO word		
CIO	Bit	Signai name (CJ/NJ)
	00	IN0/Jxx_Ch1_In00
	01	IN1/Jxx_Ch1_In01
Wd m (Input)		:
(14	IN14/Jxx_Ch1_In14
	15	IN15/Jxx_Ch1_In15
	00	IN0/Jxx_Ch2_In00
	01	IN1/Jxx_Ch2_In01
(Input)	:	:
(14	IN14/Jxx_Ch2_In14
	15	IN15/Jxx_Ch2_In15
	00	IN0/Jxx_Ch3_In00
	01	IN1/Jxx_Ch3_In01
(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)	:	:
(14	IN14/Jxx_Ch4_In14
	15	IN15/Jxx_Ch4_In15

32-point Input Unit

Allocated CIO word		Signal name (C I/N I)
CIO	Bit	Signai name (CJ/NJ)
	00	IN0/Jxx_Ch1_In00
	01	IN1/Jxx_Ch1_In01
Wd m (Input)	:	:
(input)	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

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.



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 or push-in terminal block makes it easy to connect external devices.



Α	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	Connecting Cable for I/O Relay Terminals XW2Z-R
В	I/O Relay Terminals G70V, G7TC Relay Terminals G70D, G70R I/O Terminal Socket G70A 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	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	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.

*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 www.ia.omron.com.

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. Connecting Connector-Terminal Block Conversion Units

Connection Patterns for Connector-Terminal Block Conversion Units



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-J34GD-C1	Phillips screw		
CJ1W-ID231	32 inputs	1 Fujitsu connector	NPN/PNP	А	XW2Z-DDDPF	XW2R-E34GD-C1	Slotted screw (rise up)	No	
						XW2R-P34GD-C1	Push-in spring		
						XW2R-J34GD-C2	Phillips screw		
CJ1W-ID232	32 inputs	1 MIL connector	NPN/PNP	А	XW2Z-□□□PM	XW2R-E34GD-C2	Slotted screw (rise up)	No	
						XW2R-P34GD-C2	Push-in spring		
		2 inputs 1 MIL				XW2R-J34GD-C2	Phillips screw		
CJ1W-ID233 32 inputs 1 MIL connect	1 MIL connector		NPN/PNP	А	XW2Z-□□□PM	XW2R-E34GD-C2	Slotted screw (rise up)	No	
					XW2R-P34GD-C2	Push-in spring]		
						XW2R-J34GD-C1 (2 Units)	Phillips screw		
CJ1W-ID261	64 inputs	inputs 2 Fujitsu connectors	2 Fujitsu	NPN/PNP	В	XW2Z-	XW2R-E34GD-C1 (2 Units)	Slotted screw (rise up)	No
					(XW2R-P34GD-C1 (2 Units)	Push-in spring		
						XW2R-J34GD-C2 (2 Units)	Phillips screw		
CJ1W-ID262	64 inputs	2 MIL connectors	NPN/PNP	В	XW2Z-DDPM	XW2R-E34GD-C2 (2 Units)	Slotted screw (rise up)	No	
					(1//	XW2R-P34GD-C2 (2 Units)	Push-in spring		

The box □ is replaced by the cable length.
 Note: For details, refer to the XW2R series catalog (Cat. No. G077).

3. Connecting I/O Relay Terminals

Connection Patterns for I/O Relay Terminals



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

I/O Units		Connecting Cables			I/O Relay Terminals									
Model	I/O capacity	External connectors	Polarity	pattern	Model *1	Quantity required	Model	I/O points	Quantity required	Wiring method				
		1 Euiitsu	Sinking/				G70V-SID16P(-1)(-C16) *2	16		Push-in spring				
CJ1W-ID231	32 inputs	connector	Sourcing	А	XW2Z-RI□C-□	1	G7TC-ID/IA16	16	2	Sarow torminal				
		(40 p)	(NPN/PNP)				G70A-ZIM16-5 *3	16		Screw terminar				
		1 MIL	Sinkina/				G70V-SID16P(-1)(-C16) *2	16		Push-in spring				
CJ1W-ID232	2 32 inputs	connector	Sourcing	А	XW2Z-RO -D1	1	G7TC-ID/IA16	16	2	Sarow torminal				
		(40 p)	(NPN/PNP)				G70A-ZIM16-5	16		Screw terminar				
		1 MII	Sinkina/				G70V-SID16P(-1)(-C16) *2	16		Push-in spring				
CJ1W-ID233	32 inputs	connector (40 p)	Sourcing (NPN/PNP)	tor Sourcing (NPN/PNP)	connector (40 p) (NPN/PNP)	А	XW2Z-RO -D1	1	G7TC-ID/IA16	16	2	Sorow torminal		
						(NPN/PNP)	(NPN/PNP)	(NPN/PNP)				G70A-ZIM16-5*3	16	
		2 Fujitsu connectors (40 p)	Sinking/				G70V-SID16P(-1)(-C16) *2	16		Push-in spring				
CJ1W-ID261	64 inputs		Sourcing	В	XW2Z-RI□C-□	2	G7TC-ID/IA16	16	4	Sarow torminal				
			(NPN/PNP)	(NPN/PNP)	(NPN/PNP)	(NPN/PNP)	(NPN/PNP)				G70A-ZIM16-5 *3	16		Screw terminar
		2 MII	Sinkina/				G70V-SID16P(-1)(-C16) *2	16		Push-in spring				
CJ1W-ID262 64 inputs connectors Sourcing	connectors	Sourcing	в	В	В	В	В	В	XW2Z-RO -D1	2	G7TC-ID/IA16	16	4	0
		(40 p)	(NPN/PNP)				G70A-ZIM16-5 *3	16	1	Screw (erminal				

*1. The box \Box is replaced by the cable length.

*2. Either NPN inputs or PNP inputs can be used.

*3. G70A-ZIM16-5 is a I/O terminal socket products. Relay is not provided with the socket. Be sure to order a relay, timer separetely. (with G2R Relays mounted: SPDT × 16)

Dimensions

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







(Unit: mm)

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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 <i>Software User's Manual</i> (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 <i>Software User's Manual</i> (Cat. No. W501).



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