CJ-series Output Units

CJ1W-OC/OA/OD

CSM_CJ1W-OUTPUT_DS_E_8_1

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

- These Output Units receive the results of output instructions from the CPU Unit and perform ON/OFF control for external devices.
- High-speed Output models CJ1W-OD213 and CJ1W-OD234 can help to increase system throughput.





CJ1W-OD213

CJ1W-OD234

Features

- High-speed output models are available, meeting versatile applications. ON Response Time: 15 μ s, OFF Response Time: 80 μ s
- Output Units are available with any of three output types: relay contact outputs, triac outputs, or transistor outputs.
- For transistor outputs, select from sinking outputs or sourcing outputs.
- Output Units with load short-circuit protection are also available. *1
- Select the best interface for each application: Fujitsu connectors or MIL connectors. *2
- A wide variety of Connector-Terminal Block Conversion Units are available to allow you to easily wire external output devices.
- *1. The following Units have load short-circuit protection: CJ1W-OC202, CJ1W-OD204, CJ1W-OD212, and CJ1W-OD232.
- *2. Available for models with 32 outputs or 64 outputs

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.

Output Units

Unit type	Product			Specifications			No. of words	Current consumption (A)		Model	Standards
71	name	Output type	I/O points	Maximum switching capacity	Commons	External connection	allocated	5 V	24 V		
	Relay Contact Output Units	-	8 outputs	250 VAC/24 VDC, 2 A	Independen t contacts	Removable terminal block	1 words	0.09	0.048 max.	CJ1W-OC201	
	The second second	-	16 outputs	250 VAC/24 VDC, 2 A	16 points, 1 common	Removable terminal block	1 words	0.11	0.096 max.	CJ1W-OC211	
	Triac Output Unit	-	8 outputs	250 VAC, 0.6 A	8 points, 1 common	Removable terminal block	1 words	0.22	-	CJ1W-OA201	UC1, N, L, CE
		Sinking	8 outputs	12 to 24 VDC, 2 A	4 points, 1 common	Removable terminal block	1 words	0.09	_	CJ1W-OD201	
	Transistor Output Units	Sinking	8 outputs	12 to 24 VDC, 0.5 A	8 points, 1 common	Removable terminal block	1 words	0.10	-	CJ1W-OD203	
		Sinking	16 outputs	12 to 24 VDC, 0.5 A	16 points, 1 common	Removable terminal block	1 words	0.10	-	CJ1W-OD211	
CJ1 Basic I/O Units		Sinking	16 outputs (High speed)	24 VDC, 0.5 A	16 points, 1 common	Removable terminal block	1 words	0.15	_	CJ1W-OD213	N, L, CE
		Sinking	32 outputs	12 to 24 VDC, 0.5 A	16 points, 1 common	Fujitsu connector	2 words	0.14	-	CJ1W-OD231	UC1, N, L,
		Sinking	32 outputs	12 to 24 VDC, 0.5 A	16 points, 1 common	MIL connector	2 words	0.14	-	CJ1W-OD233	CE
		Sinking	32 outputs (High speed)	24 VDC, 0.5 A	16 points, 1 common	MIL connector	2 words	0.22	_	CJ1W-OD234	N, L, CE
		Sinking	64 outputs	12 to 24 VDC, 0.3 A	16 points, 1 common	Fujitsu connector	4 words	0.17	-	CJ1W-OD261	
		Sinking	64 outputs	12 to 24 VDC, 0.3 A	16 points, 1 common	MIL connector	4 words	0.17	-	CJ1W-OD263	
		Sourcing	8 outputs	24 VDC, 2 A Short-circuit protection	4 points, 1 common	Removable terminal block	1 words	0.11	-	CJ1W-OD202	
		Sourcing	8 outputs	24 VDC, 0.5 A Short-circuit protection	8 points, 1 common	Removable terminal block	1 words	0.10	-	CJ1W-OD204	UC1, N, L, CE
		Sourcing	16 outputs	24 VDC, 0.5 A Short-circuit protection	16 points, 1 common	Removable terminal block	1 words	0.10	-	CJ1W-OD212	
		Sourcing	32 outputs	24 VDC, 0.5 A Short-circuit protection	16 points, 1 common	MIL connector	2 words	0.15	-	CJ1W-OD232	
		Sourcing	64 outputs	12 to 24 VDC, 0.3 A	16 points, 1 common	MIL connector	4 words	0.17	-	CJ1W-OD262	

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	Rem	arks	Applicable Units	Model	Standards
40-pin Connectors	Soldered	FCN-361J040-AU FCN-360C040-J2	Connector Connector Cover	Fujitsu Connectors: CJ1W-ID231(32 inputs): 1 per Unit	C500-CE404	
	Crimped	FCN-363J040 FCN-363J-AU FCN-360C040-J2	Housing Contactor Connector Cover	CJ1W-ID261 (64 inputs): 2 per Unit CJ1W-OD231 (32 outputs): 1 per Unit CJ1W-OD261 (64 outputs): 2 per Unit	C500-CE405	
	Pressure welded	FCN-367J040-AU/F		CJ1W-MD261 (32 inputs, 32 outputs): 2 per Unit	C500-CE403	
	Soldered FCN-361J024-AU FCN-360C024-J2 FCN-363J024 FCN-363J-AU FCN-360C024-J2		Connector Connector Cover		C500-CE241	_
24-pin Connectors			Socket Contactor Connector Cover	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 31 for details.

Applicable Connector-Terminal Block Conversion Units

			Number		Terminal		Size		Mou	nting	Common	Bleeder				
Туре	Series	I/O	of poles	Wiring method	type	Depth (mm)	Height (mm)	Width (mm)	DIN Track	Screws		resistance	Indicators	I/O Units	Model	Standards
				Phillips screw										CJ1W-OD231 CJ1W-OD261	XW2R-J34G-C3	
						МЗ	50	48.35	130.7					CJ1W-OD232 CJ1W-OD233 CJ1W-OD234 CJ1W-OD262 CJ1W-OD263	XW2R-J34G-C4	
	Ss XW2R Output 34	(rise up)	Slotted screw (rise up)						s Yes	No	No	No	CJ1W-OD231 CJ1W-OD261	XW2R-E34G-C3	_	
PLCs				M3 (European type)	50	45.11	98.5	Yes					CJ1W-OD232 CJ1W-OD233 CJ1W-OD234 CJ1W-OD262 CJ1W-OD263	XW2R-E34G-C4		
													CJ1W-OD231 CJ1W-OD261	XW2R-P34G-C3		
					Clamp	50	45.11	98.5						CJ1W-OD232 CJ1W-OD233 CJ1W-OD234 CJ1W-OD262 CJ1W-OD263	XW2R-P34G-C4	

Note: For the combination of Output 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)		Mounting														
Туре	Type Series		Classification		Polarity	Number of points	Rated ON current at contacts Operation		Terminal block for power supply wiring	Horizontal (mm) Vertical (mm) Height (mm)		DIN Track	Screws	Model	Standrads												
		Vertical		Relay outputs MOSFET relay outputs		16	5A or 3A				46	81			G70D-VSOC16	U, C,											
		type G70D-V			NPN	(SPST- NO × 16)	0.3A	Yes	Expandable	135			Yes	Yes	G70D-VFOM16	CE											
						8 (SPST- NO × 8)	5A			68	93	44			G70D-SOC08	-											
Space- saving		G70D	G70D		Outputs	Relay outputs	NPN	16 (SPST- NO × 16)	3A								G70D-SOC16										
							type	type			PNP	16 (SPST- NO × 16)	3A	Yes	_	156	6 51	39	Yes	Yes	G70D-SOC16-1						
					MOSFET relay	NPN	16 (SPST-	0.3A								G70D-FOM16	_										
															outputs	PNP	NO × 16)	U.SA								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	_											
			Inputs AC inputs DC inputs			16	1A			100				G7TC-IA16													
					NPN	(SPST- NO × 16)				182					G7TC-ID16												
Standard	G7TC	0770		G7TC		GTC		GZTC				8 (SPST- NO × 8)		Yes		102	85	68	Yes	_	G7TC-OC08	U, C					
Otaridara	a, io		Outputs	Relay outputs	NPN	16 (SPST- NO × 16)	5A	100		182	. 00	00	100		G7TC-OC16												
					PNP	16 (SPST- NO × 16)				102					G7TC-OC16-1	-											
High-	G70A	G70A		Relay	NPN	16 (SPDT × 16	10 A (Terminal	No		224	75	64	Vaa		G70A-ZOC16-3 (Socket only) + Relay/SSR/ MOSFET Relay/ Timer	U, C,											
capacity socket		et only)	Outputs	outputs	PNP	possible with G2R Relays)	block allowable current)	No	_	234	75	64	Yes	_	(Socket only) + Relay/SSR/ MOSFET Relay/ Timer	CE											

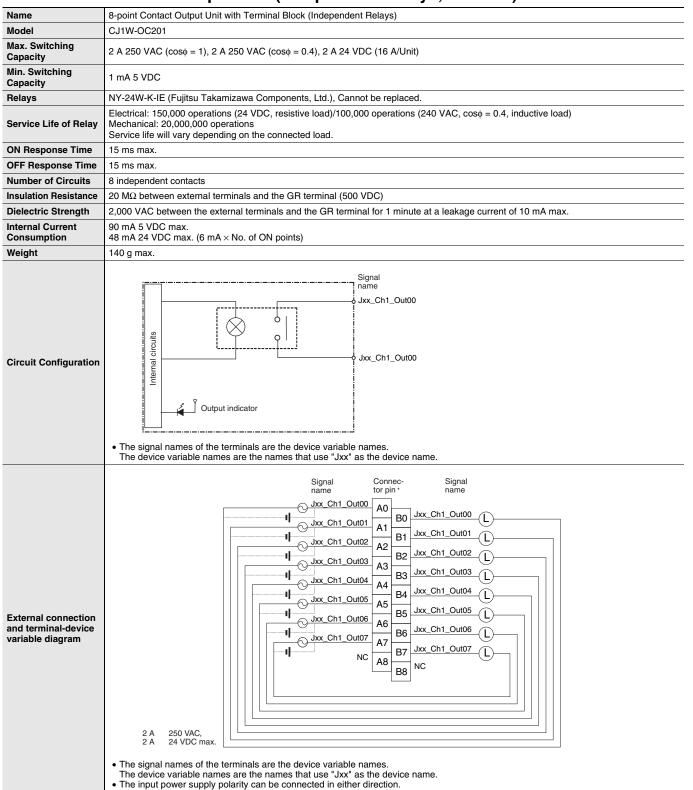
Note: For the combination of Output Units with I/O Relay Terminal and Connecting Cables, refer to 3. Connecting I/O Relay Terminals.

Mountable Racks

	NJ s	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-OC201				10 Units (Per Expansion Backplane)		Not Supported		
CJ1W-OC211								
CJ1W-OA201							10 Units (Per Expansion Backplane)	
CJ1W-OD201			10 Units		Not Supported			
CJ1W-OD203		10 Units (Per Expansion						
CJ1W-OD211								
CJ1W-OD213								
CJ1W-OD231								
CJ1W-OD233	10 Units							
CJ1W-OD234		Rack)						
CJ1W-OD261								
CJ1W-OD263								
CJ1W-OD202								
CJ1W-OD204								
CJ1W-OD212							ı	
CJ1W-OD232								
CJ1W-OD262								

Specifications

CJ1W-OC201 Contact Output Unit (Independent Relays, 8 Points)



^{*} 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-OC211 Contact Output Unit (16 Points)

2 A 250 VAC, 2 A 24 VDC max.

Name	16-point Contact Output Unit with Terminal Block
Model	CJ1W-OC211
Max. Switching Capacity	2 A 250 VAC (cosφ = 1), 2 A 250 VAC (cosφ = 0.4), 2 A 24 VDC (8 A/Unit)
Min. Switching Capacity	1 mA 5 VDC
Relays	NY-24W-K-IE (Fujitsu Takamizawa Components, Ltd.), Cannot be replaced.
Service Life of Relay	Electrical: 150,000 operations (24 VDC, resistive load)/ 100,000 operations (250 VAC, cos\phi = 0.4, inductive load) Mechanical: 20,000,000 operations Service life will vary depending on the connected load.
ON Response Time	15 ms max.
OFF Response Time	15 ms max.
Number of Circuits	16 points/common, 1 circuit
nsulation Resistance	20 M Ω 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	110 mA 5 VDC max. 96 mA 24 VDC max. (6 mA × No. of ON points)
Weight	170 g max.
Circuit Configuration	Signal name Jxx_Ch1_Out00 to Jxx_Ch1_Out15 COM COM COM 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

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.

В8 СОМ

^{*} 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-OA201 Triac Output Unit (8 Points) 8-point Triac Output Unit with Terminal Block Name Model CJ1W-OA201 Max. Switching 0.6 A 250 VAC, 50/60 Hz (2.4 A/Unit) Capacity 15 A (pulse width: 10 ms max.) Max. Inrush Current Min. Switching 50 mA 75 VAC Capacity Leakage Current 1.5 mA (200 VAC) max. **Residual Voltage** 1.6 VAC max. **ON Response Time** 1 ms max. **OFF Response Time** 1/2 of load frequency + 1 ms or less. **Number of Circuits** 8 (8 points/common, 1 circuit) Surge Protector C.R Absorber + Surge Absorber 5 A (1/common, 1 used) **Fuses** The fuse cannot be replaced by the user. Insulation Resistance 20 $M\Omega$ between the 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 Weight 150 g max. circuits Jxx_Ch1_Out00 OJXX_Ch1_Out07 **Circuit Configuration** Internal Fuse • 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 Connector pin * Signal name NC Α0 Jxx_Ch1_Out00 B0 NC Jxx_Ch1_Out01 **B1** NC Α2 Jxx_Ch1_Out02 R2 NC А3 Jxx Ch1 Out03 ВЗ **External connection** NC 250 VAC max. and terminal-device Α4 Jxx_Ch1_Out04 variable diagram B4 NC Α5 Jxx_Ch1_Out05 B5 NC A6 Jxx_Ch1_Out06 NC Α7 Jxx_Ch1_Out07 В7 NC Α8 СОМ

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

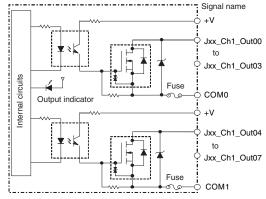
B8

^{*} 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-OD201 Transistor Output Unit (8 Points)

Name	8-point Transistor Output Unit with Terminal Block (Sinking Outputs)
Model	CJ1W-OD201
Rated Voltage	12 to 24 VDC
Operating Load Voltage Range	10.2 to 26.4 VDC
Maximum Load Current	2.0 A/point, 8.0 A/Unit
Maximum Inrush Current	10 A/point, 10 ms max.
Leakage Current	0.1 mA max.
Residual Voltage	1.5 V max.
ON Response Time	0.5 ms max.
OFF Response Time	1.0 ms max.
Insulation Resistance	$20~\text{M}\Omega$ between the 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.
Number of Circuits	8 (4 points/common, 2 circuits)
Internal Current Consumption	90 mA max.
Fuse	6.3 A (1/common, 2 used) The fuse cannot be replaced by the user.
External Power Supply	12 to 24 VDC, 10 mA min.
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.

Connec-

tor pin

Signal

Signal

Jxx_Ch1_Out00 Α0 Jxx_Ch1_Out01 B0 Α1 Jxx_Ch1_Out03 B1 A2 12 to 24 VDC NC B2 COM0 АЗ ВЗ NC Α4 **External connection** NC B4 and terminal-device variable diagram Jxx Ch1 Out04 A5 Jxx_Ch1_Out05 L B5 Α6 В6 Α7 NC 12 to 24 VDC B7 COM1

- When wiring, pay careful attention to the polarity of the external power supply. The load may operate incorrectly if the polarity is reversed.
 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.

Α8

+V B8

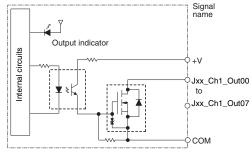
Note: Although 16 I/O bits (1 word) are allocated, only 8 of these can be used for external I/O.

^{*} 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

CJ1W-OD203 Transistor Output Unit (8 Points)

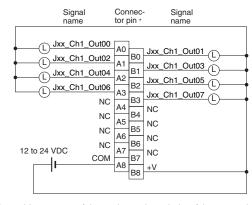
Name	8-point Transistor Output Unit with Terminal Block (Sinking Outputs)
Model	CJ1W-OD203
Rated Voltage	12 to 24 VDC
Operating Load Voltage Range	10.2 to 26.4 VDC
Maximum Load Current	0.5 A/point, 4.0 A/Unit
Maximum Inrush Current	4.0 A/point, 10 ms max.
Leakage Current	0.1 mA max.
Residual Voltage	1.5 V max.
ON Response Time	0.1 ms max.
OFF Response Time	0.8 ms max.
Insulation Resistance	20 M Ω between the 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.
Number of Circuits	8 (8 points/common, 1 circuit)
Internal Current Consumption	100 mA max.
Fuse	None
External Power Supply	10.2 to 26.4 VDC, 20 mA min.
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



- When wiring, pay careful attention to the polarity of the external power supply. The load may operate incorrectly if the polarity is reversed.
- 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.

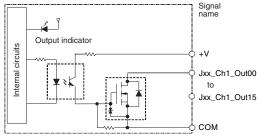
Note: Although 16 I/O bits (1 word) are allocated, only 8 of these can be used for external I/O.

^{*} 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-OD211 Transistor Output Unit (16 Points)

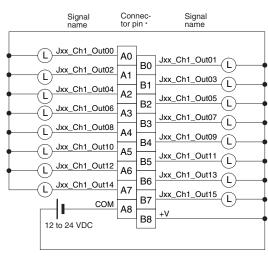
Name	16-point Transistor Output Unit with Terminal Block (Sinking Outputs)
Model	CJ1W-OD211
Rated Voltage	12 to 24 VDC
Operating Load Voltage Range	10.2 to 26.4 VDC
Maximum Load Current	0.5 A/point, 5.0 A/Unit
Maximum Inrush Current	4.0 A/point, 10 ms max.
Leakage Current	0.1 mA max.
Residual Voltage	1.5 V max.
ON Response Time	0.1 ms max.
OFF Response Time	0.8 ms max.
Insulation Resistance	20 MΩ between the 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.
Number of Circuits	16 (16 points/common, 1 circuit)
Internal Current Consumption	5 VDC 100 mA max.
Fuse	None
External Power Supply	10.2 to 26.4 VDC, 20 mA min.
Weight	110 g max.
	Sinnal

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



- When wiring, pay careful attention to the polarity of the external power supply. The load may operate incorrectly if the polarity is reversed.

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

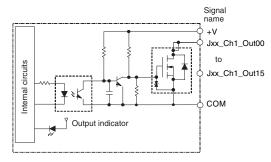
The device variable names are the names that use "Jxx" as the device name.

^{*} 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-OD213 Transistor Output Unit (16 Points)

Name	16-point Transistor Output Unit with Terminal Block (Sinking Outputs)
Model	CJ1W-OD213
Rated Voltage	24 VDC
Operating Load Voltage Range	20.4 to 26.4 VDC
Maximum Load Current	0.5 A/point, 5.0 A/Unit
Maximum Inrush Current	4.0 A/point, 10 ms max.
Leakage Current	0.1 mA max.
Residual Voltage	1.5 V max.
ON Response Time	15 μs max.
OFF Response Time	80 μs max.
Insulation Resistance	20 M Ω between the 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.
Number of Circuits	16 (16 points/common, 1 circuit)
Internal Current Consumption	5 VDC 150 mA max.
Fuse	None
External Power Supply	20.4 to 26.4 VDC, 55 mA min.
Weight	110 g max.

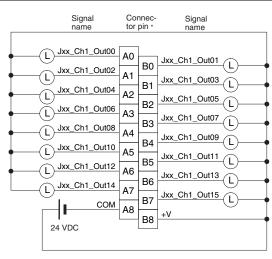
Circuit Configuration



• 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



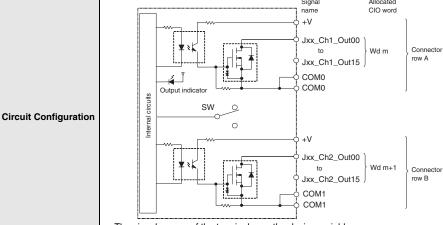
- When wiring, pay careful attention to the polarity of the external power supply. The load may operate incorrectly if the polarity is reversed.
- The signal names of the terminals are the device variable names.

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

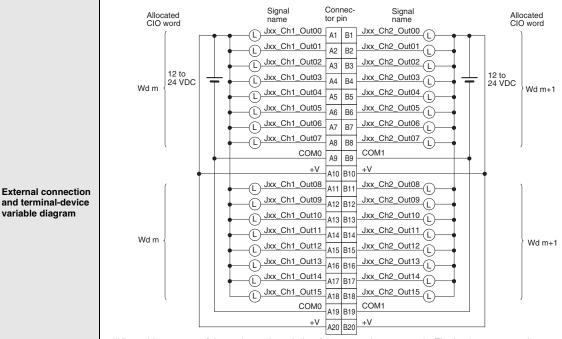
^{*} Terminal numbers A0 to A8 and B0 to B8 are used in the external connection and terminal-device variable diagrams. They are not printed on the Units.

CJ1W-OD231 Transistor Output Unit (32 Points)

Name	32-point Transistor Output Unit with Fujitsu Connector (Sinking Outputs)
Model	CJ1W-OD231
Rated Voltage	12 to 24 VDC
Operating Load Voltage Range	10.2 to 26.4 VDC
Maximum Load Current	0.5 A/point, 2.0 A/common, 4.0 A/Unit
Maximum Inrush Current	4.0 A/point, 10 ms max.
Leakage Current	0.1 mA max.
Residual Voltage	1.5 V max.
ON Response Time	0.1 ms max.
OFF Response Time	0.8 ms max.
Insulation Resistance	20 M Ω between the 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.
Number of Circuits	32 (16 points/common, 2 circuits)
Internal Current Consumption	5 VDC 140 mA max.
Fuse	None
External Power Supply	10.2 to 26.4 VDC, 30 mA min.
Weight	70 g max.
Accessories	None
	Signal Allocated



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.



- When wiring, pay careful attention to the polarity of the external power supply. The load may operate incorrectly if the polarity is reversed.
 Be sure to wire both terminals A9 and A19 (COM0).
 Be sure to wire both terminals B9 and B19 (COM1).
 Be sure to wire both terminals A10 and A20 (+V).
 Be sure to wire both terminals B10 and B20 (+V).
 The signal pages of the terminals are the device variable pages.

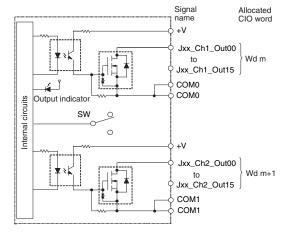
- The signal names of the terminals are the device variable names.

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

CJ1W-OD233 Transistor Output Unit (32 Points)

Name	32-point Transistor Output Unit with MIL Connector (Sinking Outputs)		
Model	CJ1W-OD233		
Rated Voltage	12 to 24 VDC		
Operating Load Voltage Range	10.2 to 26.4 VDC		
Maximum Load Current	0.5 A/point, 2 A/common, 4 A/Unit		
Maximum Inrush Current	4.0 A/point, 10 ms max.		
Leakage Current	0.1 mA max.		
Residual Voltage	1.5 V max.		
ON Response Time	0.1 ms max.		
OFF Response Time	0.8 ms max.		
Insulation Resistance	20 MΩ between the 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.		
Number of Circuits	32 (16 points/common, 2 circuits)		
Internal Current Consumption	140 mA max.		
Fuse	None		
External Power Supply	12 to 24 VDC, 30 mA min.		
Weight	70 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.

Allocated CIO word Signal name Connec-Allocated CIO word 12 to 24 VDC 1 2 COM1 COM₁ 3 4 Jxx_Ch2_Out15 Jxx_Ch2_Out07 5 6 Jxx_Ch2_Out14 Jxx_Ch2_Out06 (L) 7 8 Jxx_Ch2_Out13 Jxx_Ch2_Out05 9 10 Wd m+1 Jxx_Ch2_Out12 Jxx_Ch2_Out04 Wd m+1 11 12 Jxx_Ch2_Out11 Jxx_Ch2_Out03 13 14 Jxx_Ch2_Out10 Jxx_Ch2_Out02 Jxx_Ch2_Out01 17 18 ______Jxx_Ch2_Out08 Jxx Ch2 Out00 19 20 (L) +V +V 21 22 СОМО COM0 Jxx_Ch1_Out15 Jxx_Ch1_Out07 Jxx_Ch1_Out14 Jxx_Ch1_Out06 27 28 Jxx_Ch1_Out13 Jxx_Ch1_Out05 Wdm Jxx_Ch1_Out12 31 32 Wd Jxx Ch1 Out03 Jxx Ch1 Out11 (L) Jxx_Ch1_Out10 Jxx_Ch1_Out02 35 36 Jxx_Ch1_Out01 Jxx_Ch1_Out09 (L)-37 38 ______Jxx_Ch1_Out08

- **External connection** and terminal-device variable diagram
- When wiring, pay careful attention to the polarity of the external power supply. The load may operate incorrectly if the polarity is reversed.
- Be sure to wire both terminals 23 and 24 (COM0).
- Be sure to wire both terminals 3 and 4 (COM1).
- Be sure to wire both terminals 21 and 22 (+V).
- Be sure to wire both terminals 1 and 2 (+V).
- 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

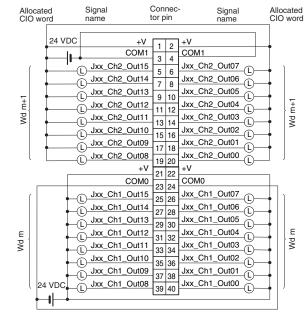
CJ1W-OD234 Transistor Output Unit (32 Points)

Name	32-point Transistor Output Unit with MIL Connector (Sinking Outputs)		
Model	CJ1W-OD234		
Rated Voltage	24 VDC		
Operating Load Voltage Range	20.4 to 26.4 VDC		
Maximum Load Current	0.5 A/point, 2 A/common, 4 A/Unit		
Maximum Inrush Current	4.0 A/point, 10 ms max.		
Leakage Current	0.1 mA max.		
Residual Voltage	1.5 V max.		
ON Response Time	15 μs max.		
OFF Response Time	80 μs max.		
Insulation Resistance	20 M Ω between the 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.		
Number of Circuits	32 (16 points/common, 2 circuits)		
Internal Current Consumption	220 mA max.		
Fuse	None		
External Power Supply	20.4 to 26.4 VDC, 110 mA min.		
Weight	70 g max.		

Signal name

CIO word Jxx_Ch1_Out00 Wd m Jxx_Ch1_Out15 COMO 5 сомо Internal circuits **Circuit Configuration** SW Jxx_Ch2_Out00 to Wd m+1 Jxx_Ch2_Out15 COM1 COM₁

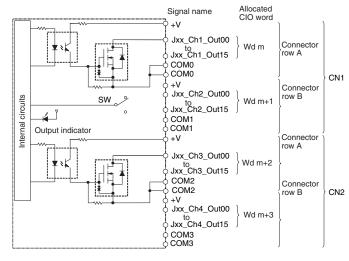
• The signal names of the terminals are the device variable names. The device variable names are the names that use "Jxx" as the device name.



- **External connection** and terminal-device variable diagram
- When wiring, pay careful attention to the polarity of the external power supply. The load may operate incorrectly if the polarity is reversed.
- Be sure to wire both terminals 23 and 24 (COM0).
- Be sure to wire both terminals 3 and 4 (COM1).
- Be sure to wire both terminals 21 and 22 (+V).
- Be sure to wire both terminals 1 and 2 (+V).
- 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

CJ1W-OD261 Transistor Output Unit (64 Points)

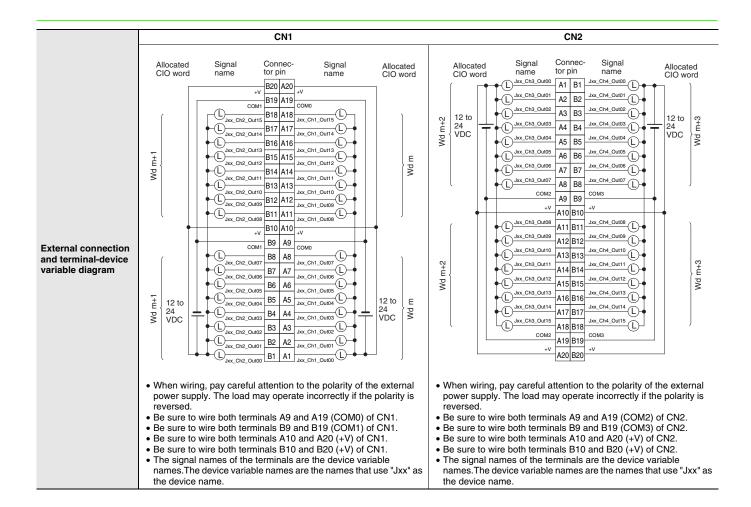
Name	64-point Transistor Output Unit with Fujitsu Connectors (Sinking Outputs)		
Model	CJ1W-OD261		
Rated Voltage	12 to 24 VDC		
Operating Load Voltage Range	10.2 to 26.4 VDC		
Maximum Load Current	0.3 A/point, 1.6 A/common, 6.4 A/Unit		
Maximum Inrush Current	3.0 A/point, 10 ms max.		
Leakage Current	0.1 mA max.		
Residual Voltage	1.5 V max.		
ON Response Time	0.5 ms max.		
OFF Response Time	1.0 ms max.		
Insulation Resistance	$20~\text{M}\Omega$ between the 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.		
Number of Circuits	64 (16 points/common, 4 circuits)		
Internal Current Consumption	5 VDC, 170 mA max.		
Fuse	None		
External Power Supply	10.2 to 26.4 VDC, 50 mA min.		
Weight	110 g max.		
Accessories	None		



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

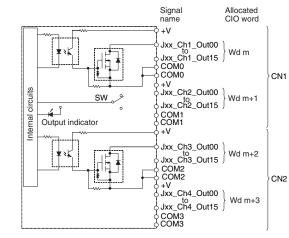
The device variable names are the names that use "Jxx" as the device name.

Circuit Configuration



CJ1W-OD263 Transistor Output Unit (64 Points)

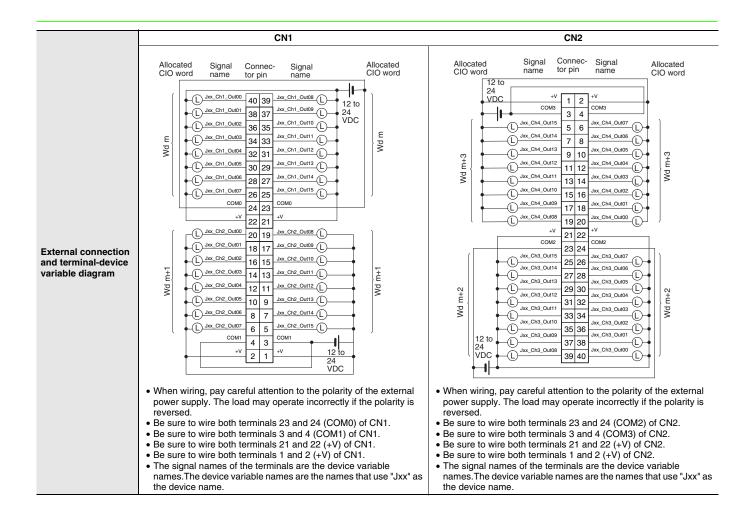
Name	64-point Transistor Output Unit with MIL Connectors (Sinking Outputs)	
Model	CJ1W-OD263	
Rated Voltage	12 to 24 VDC	
Operating Load Voltage Range	10.2 to 26.4 VDC	
Maximum Load Current	0.3 A/point, 1.6 A/common, 6.4 A/Unit	
Maximum Inrush Current	3.0 A/point, 10 ms max.	
Leakage Current	0.1 mA max.	
Residual Voltage	1.5 V max.	
ON Response Time	0.5 ms max.	
OFF Response Time	1.0 ms max.	
Insulation Resistance	20 M Ω between the 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.	
Number of Circuits	64 (16 points/common, 4 circuits)	
Internal Current Consumption	170 mA max.	
Fuse	None	
External Power Supply	12 to 24 VDC, 50 mA min.	
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.



CJ1W-OD202 Transistor Output Unit (8 Points)

Name	8-point Transistor Output Unit with Terminal Block (Sourcing Outputs)	
Model	CJ1W-OD202	
Rated Voltage	24 VDC	
Operating Load Voltage Range	20.4 to 26.4 VDC	
Maximum Load Current	2 A/point, 8 A/Unit	
Leakage Current	0.1 mA max.	
Residual Voltage	1.5 V max.	
ON Response Time	0.5 ms max.	
OFF Response Time	1.0 ms max.	
Load Short-circuit Protection	Detection current: 6 A min. Automatic restart after error clearance.	
Line Disconnection Detection	Detection current: 200 mA	
Insulation Resistance	20 MΩ between the 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.	
Number of Circuits	8 (4 points/common, 2 circuits)	
Internal Current Consumption	110 mA max.	
Fuse	None	
External Power Supply	24 VDC, 50 mA min.	
Weight	120 g max.	

Circuit Configuration Signal name COM0 (+V) Jxx_Ch1_Out00 O V SJxx_Ch1_Out03 O V SJxx_Ch1_Out04 O V SJxx_Ch1_Out07 O V

- When overcurrent or line disconnection is detected, the ERR indicator will light, and the corresponding bit (two points per bit) in the Basic I/O Unit Information Area (A050 to A069) will change to TRUE.
- 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

tor pin' Jxx_Ch1_Out00 Α0 Jxx_Ch1_Out01 B0 Α1 Jxx_Ch1_Out03 L В1 NC Α2 NC B2 24 VDC 0 V АЗ COM0 (+V) ВЗ NC Α4 **External connection** B4 and terminal-device A5 variable diagram B5 Jxx_Ch1_Out06 A6 Jxx_Ch1_Out07 B6 NC Α7 B7 0 V 24 VDC Α8 COM1 (+V) В8

- When wiring, pay careful attention to the polarity of the external power supply. The load may operate incorrectly if the polarity is reversed.
- 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.

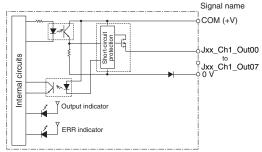
Note: Although 16 I/O bits (1 word) are allocated, only 8 of these can be used for external I/O.

^{*} 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-OD204 Transistor Output Unit (8 Points)

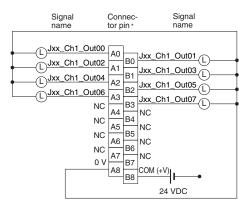
Name	8-point Transistor Output Unit with Terminal Block (Sourcing Outputs)	
Model	CJ1W-OD204	
Rated Voltage	24 VDC	
Operating Load Voltage Range	20.4 to 26.4 VDC	
Maximum Load Current	0.5 A/point, 4.0 A/Unit	
Leakage Current	0.1 mA max.	
Residual Voltage	1.5 V max.	
ON Response Time	0.5 ms max.	
OFF Response Time	1.0 ms max.	
Load Short-circuit Protection	Detection current: 0.7 to 2.5 A Automatic restart after error clearance.	
Insulation Resistance	20 M Ω between the 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.	
Number of Circuits	8 (8 points/common, 1 circuit)	
Internal Current Consumption	5 VDC, 100 mA max.	
Fuse	None	
External Power Supply	20.4 to 26.4 VDC, 40 mA min.	
Weight	120 g max.	
	Signal nama	

Circuit Configuration



- When overcurrent is detected, the ERR indicator will light, and the corresponding bit in the Basic I/O Unit Information Area (A050 to A069) will change to TRUE.
- 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



- When wiring, pay careful attention to the polarity of the external power supply. The load may operate incorrectly if the polarity is reversed.
- 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.

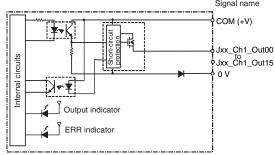
Note: Although 16 I/O bits (1 word) are allocated, only 8 of these can be used for external I/O.

^{*} 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-OD212 Transistor Output Unit (16 Points)

Name	16-point Transistor Output Unit with Terminal Block (Sourcing Outputs)	
Model	CJ1W-OD212	
Rated Voltage	24 VDC	
Operating Load Voltage Range	20.4 to 26.4 VDC	
Maximum Load Current	0.5 A/point, 5.0 A/Unit	
Maximum Inrush Current	0.1 mA max.	
Leakage Current	1.5 V max.	
ON Response Time	0.5 ms max.	
OFF Response Time	1.0 ms max.	
Load Short-circuit Protection	Detection current: 0.7 to 2.5 A Automatic restart after error clearance.	
Insulation Resistance	$20~{\rm M}\Omega$ between the 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.	
Number of Circuits	16 (16 points/common, 1 circuit)	
Internal Current Consumption	5 VDC, 100 mA max.	
External Power Supply	20.4 to 26.4 VDC, 40 mA min.	
Weight	120 g max.	
	Signal name	

Circuit Configuration



- When overcurrent is detected, the ERR indicator will light, and the corresponding bit in the Basic I/O Unit Information Area (A050 to A069) will change to TRUE.
- 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

Connector pin * Signal Signal Jxx Ch1 Out00 Α0 Jxx_Ch1_Out01 В0 В1 Α2 Jxx_Ch1_Out05 B2 Jxx_Ch1_Out07 ВЗ Jxx_Ch1_Out08 **External connection** Jxx_Ch1_Out09 В4 and terminal-device variable diagram Jxx Ch1 Out11 B5 (L) Jxx Ch1 Out12 Jxx_Ch1_Out13 L Jxx_Ch1_Out14 B6 Jxx_Ch1_Out15 B7 Α8 COM (+V) B8 24 VDC

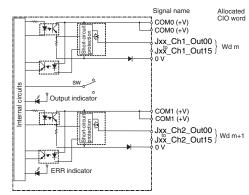
- When wiring, pay careful attention to the polarity of the external power supply. The load may operate incorrectly if the polarity is reversed.
 The signal names of the terminals are the device variable names.

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

^{*} 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.

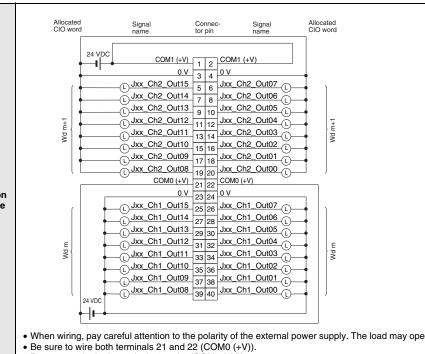
CJ1W-OD232 Transistor Output Unit (32 Points)

Name	32-point Transistor Output Unit with MIL Connector (Sourcing Outputs)	
Model	CJ1W-OD232	
Rated Voltage	24 VDC	
Operating Load Voltage Range	20.4 to 26.4 VDC	
Maximum Load Current	0.5 A/point, 2.0 A/common, 4.0 A/Unit	
Leakage Current	0.1 mA max.	
Residual Voltage	1.5 V max.	
ON Response Time	0.5 ms max.	
OFF Response Time	1.0 ms max.	
Load Short-circuit Protection	Detection current: 0.7 to 2.5 A Automatic restart after error clearance.	
Insulation Resistance	20 M Ω between the 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.	
Number of Circuits	32 (16 points/common, 2 circuits)	
Internal Current Consumption	5 VDC 150 mA max.	
External Power Supply	20.4 to 26.4 VDC, 70 mA min.	
Weight	80 g max.	
Accessories	None	



Circuit Configuration

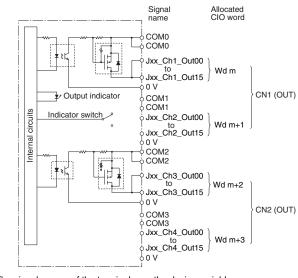
- When overcurrent is detected, the ERR indicator will light, and the corresponding bit (bit allocated for each common) in the Basic I/O Unit Information Area (A050 to A069) will change to TRUE.
 The signal names of the terminals are the device variable names.
- The device variable names are the names that use "Jxx" as the device name.



- **External connection** and terminal-device variable diagram
- When wiring, pay careful attention to the polarity of the external power supply. The load may operate incorrectly if the polarity is reversed.
- Be sure to wire both terminals 1 and 2 (COM1 (+V)).
- Be sure to wire both terminals 3 and 4 (0 V).
- Be sure to wire both terminals 23 and 24 (0 V).
- 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.

CJ1W-OD262 Transistor Output Unit (64 Points)

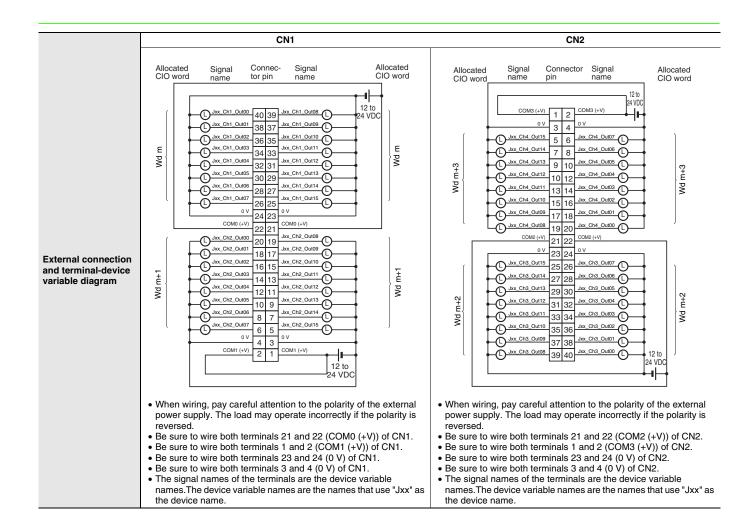
Name	64-point Transistor Output Unit with MIL Connectors (Sourcing Outputs)		
Model	CJ1W-OD262		
Rated Voltage	12 to 24 VDC		
Operating Load Voltage Range	10.2 to 26.4 VDC		
Maximum Load Current	0.3 A/point, 1.6 A/common, 6.4 A/Unit		
Maximum Inrush Current	3.0 A/point, 10 ms max.		
Leakage Current	0.1 mA max.		
Residual Voltage	1.5 V max.		
ON Response Time	0.5 ms max.		
OFF Response Time	1.0 ms max.		
Insulation Resistance	$20~\text{M}\Omega$ between the 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.		
Number of Circuits	64 (16 points/common, 4 circuits)		
Internal Current Consumption	170 mA max. (5 VDC)		
Fuse	None		
External Power Supply	10.2 to 26.4 VDC, 50 mA min.		
Weight	110 g max.		
Accessories	None		



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.



Bit Allocations for Output Unit

8-point Output Unit

Allocated CIO word		Signal name (C I/N I)	
CIO	Bit	Signal name (CJ/NJ)	
	00	OUT0/Jxx_Ch1_Out00	
	01	OUT1/Jxx_Ch1_Out01	
	:	:	
	06	OUT6/Jxx_Ch1_Out06	
Wd m	07	OUT7/Jxx_Ch1_Out07	
(Output)	08	_	
	09	_	
	:	:	
	14	_	
	15	-	

32-point Output Unit

Allocated	Cirnal name (C I/NII)		
CIO	Bit	Signal name (CJ/NJ)	
	00	OUT0/Jxx_Ch1_Out00	
	01	OUT1/Jxx_Ch1_Out01	
Wd m (Output)	:	:	
(Output)	14	OUT14/Jxx_Ch1_Out14	
	15	OUT15/Jxx_Ch1_Out15	
	00	OUT0/Jxx_Ch2_Out00	
	01	OUT1/Jxx_Ch2_Out01	
Wd m+1 (Output)	:	:	
(Output)	14	OUT14/Jxx_Ch2_Out14	
	15	OUT15/Jxx_Ch2_Out15	

16-point Output Unit

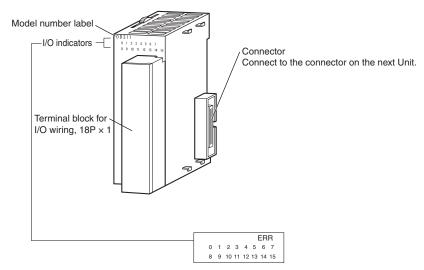
Allocated CIO word		Cinnal name (C I/N I)
CIO	Bit	Signal name (CJ/NJ)
	00	OUT0/Jxx_Ch1_Out00
	01	OUT1/Jxx_Ch1_Out01
Wd m (Output)	:	:
(Output)	14	OUT14/Jxx_Ch1_Out14
	15	OUT15/Jxx_Ch1_Out15

64-point Output Unit

Allocated CIO word			
CIO	Bit	Signal name (CJ/NJ)	
	00	OUT0/Jxx_Ch1_Out00	
	01	OUT1/Jxx_Ch1_Out01	
Wd m (Output)	:	:	
(Calpai)	14	OUT14/Jxx_Ch1_Out14	
	15	OUT15/Jxx_Ch1_Out15	
	00	OUT0/Jxx_Ch2_Out00	
	01	OUT1/Jxx_Ch2_Out01	
Wd m+1 (Output)	:	:	
(Output)	14	OUT14/Jxx_Ch2_Out14	
	15	OUT15/Jxx_Ch2_Out15	
	00	OUT0/Jxx_Ch3_Out00	
	01	OUT1/Jxx_Ch3_Out01	
Wd m+2 (Output)	:	:	
(Galpai)	14	OUT14/Jxx_Ch3_Out14	
	15	OUT15/Jxx_Ch3_Out15	
	00	OUT0/Jxx_Ch4_Out00	
	01	OUT1/Jxx_Ch4_Out01	
Wd m+3 (Output)	:	:	
(Output)	14	OUT14/Jxx_Ch4_Out14	
	15	OUT15/Jxx_Ch4_Out15	

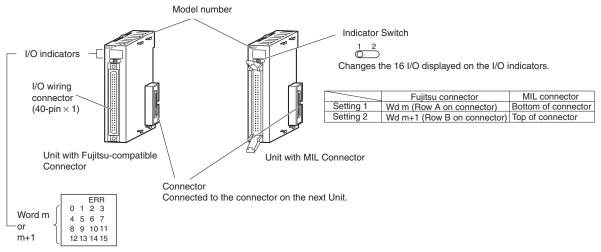
External Interface

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



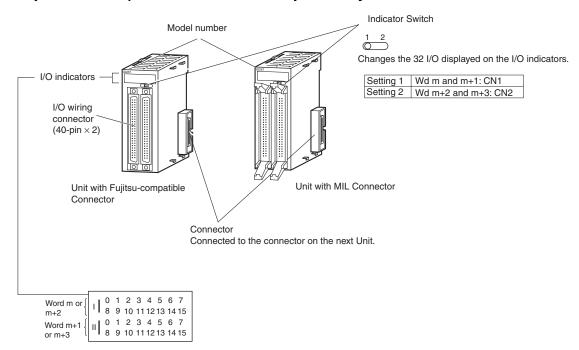
Note: The CJ1W-OD202, CJ1W-OD204, and CJ1W-OD212 also have an ERR indicator for the load short-circuit alarm.

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



Note: Only the CJ1W-OD232 has an ERR indicator for the load short-circuit alarm.

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.

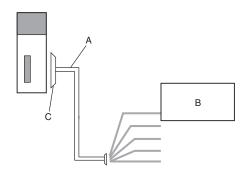


I/O Unit Wiring Methods

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.

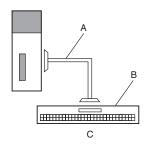


Α	User-provided cable
В	External device
С	Connector

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.

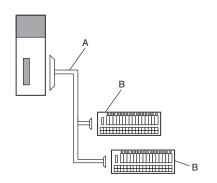


Α	Connecting Cable for Connector-Terminal Block Conversion Unit XW2Z
В	Connector-Terminal Block Conversion Unit XW2R
С	Conversion to a screw terminal block

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	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-OD231	Transistor Output Unit with Sinking Outputs, 32 outputs	40
CJ1W-OD261	Transistor Output Unit with Sinking Outputs, 64 outputs	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-OD232	Transistor Output Unit with sourcing outputs, 32 outputs	
CJ1W-OD262	Transistor Output Unit with sourcing outputs, 64 outputs	
CJ1W-OD233 CJ1W-OD234	Transistor Output Unit with sinking outputs, 32 outputs	40
CJ1W-OD263	Transistor Output Unit with sinking outputs, 64 outputs	

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.

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 www.ia.omron.com.

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

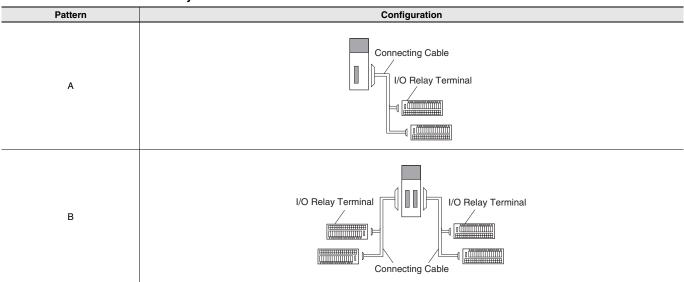
Unit	I/O capacity	Number of connectors	Polarity	Connection pattern	Connecting Cable	Connector-Terminal Block Conversion Unit	Wiring method	Common terminals
				А	XW2Z-□□B	XW2R-J34G-C3	Phillips screw	No
CJ1W- OD231	32 outputs	1 Fujitsu connector	NPN			XW2R-E34G-C3	Slotted screw (rise up)	
						XW2R-P34G-C3	Push-in spring	
						XW2R-J34G-C4	Phillips screw	No
CJ1W- OD232	32 outputs	1 MIL connector	PNP	A	XW2Z-□□□K	XW2R-E34G-C4	Slotted screw (rise up)	
						XW2R-P34G-C4	Push-in spring	
						XW2R-J34G-C4	Phillips screw	
CJ1W- OD233 32 outputs 1 MIL connector	1 MIL connector	NPN	Α	XW2Z-□□□K	XW2R-E34G-C4	Slotted screw (rise up)	No	
	02200					XW2R-P34G-C4	Push-in spring	
						XW2R-J34G-C4	Phillips screw	
32 Outpute	1 MIL connector	NPN	Α	XW2Z-□□□K	XW2R-E34G-C4	Slotted screw (rise up)	No	
						XW2R-P34G-C4	Push-in spring	1
					XW2Z-□□□B (2 Cables)	XW2R-J34G-C3 (2 Units)	Phillips screw	No
CJ1W- OD261	64 outputs	2 Fujitsu connectors	NPN	В		XW2R-E34G-C3 (2 Units)	Slotted screw (rise up)	
						XW2R-P34G-C3 (2 Units)	Push-in spring	
		outputs 2 MIL connectors PNP			XW2Z-□□□K (2 Cables)	XW2R-J34G-C4 (2 Units)	Phillips screw	
CJ1W- OD262			PNP	NP B		XW2R-E34G-C4 (2 Units)	Slotted screw (rise up)	No
						XW2R-P34G-C4 (2 Units)	Push-in spring	
		puts 2 MIL connectors	NPN	NPN B	XW2Z-□□□K (2 Cables)	XW2R-J34G-C4 (2 Units)	Phillips screw	
CJ1W- OD263	64 outputs					XW2R-E34G-C4 (2 Units)	Slotted screw (rise up)	No
					,	XW2R-P34G-C4 (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.	XW2Z-150B	1.5
	to One 40-pin MIL Connector	XW2Z-200B	2
		XW2Z-300B	3
		XW2Z-500B	5
XW2Z-□□□K		XW2Z-C50K	0.5
		XW2Z-100K	1
	One 40 nin MII Connector to One 40 nin MII Connector	XW2Z-150K	1.5
	One 40-pin MIL Connector to One 40-pin MIL Connector	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

Unit	I/O capacity	Number of connectors	Polarity	Connection pattern	Number of branches	Connecting Cable	I/O Relay Terminal
CJ1W-OD231 32 outp		1 Fujitsu connector	NPN	Α	2	G79-O□C-□	G7TC-OC16
				Α	2	G79-O□C-□	G7TC-OC08
				Α	2	G79-O□C-□	G70D-SOC16
				Α	2	G79-O□C-□	G70D-FOM16
	32 outputs			Α	2	G79-O□C-□	G70D-VSOC16
				Α	2	G79-O□C-□	G70D-VFOM16
				Α	2	G79-O□C-□	G70A-ZOC16-3 and Relay
				Α	2	G79-O□C-□	G70R-SOC08
				Α	2	G79-O□C-□	G70D-SOC08
CJ1W-OD232 32 0		1 MIL connector	PNP	Α	2	G79-I□-□-D1	G7TC-OC16-1
	20 autouta			Α	2	G79-O□-□-D1	G70D-SOC16-1
	32 outputs			Α	2	G79-O□-□-D1	G70D-FOM16-1
				Α	2	G79-O□-□-D1	G70A-ZOC16-4 and Relay

Unit	I/O capacity	Number of connectors	Polarity	Connection pattern	Number of branches	Connecting Cable	I/O Relay Terminal
				Α	2	G79-O□-□-D1	G7TC-OC16
				Α	2	G79-O□-□-D1	G7TC-OC08
				Α	2	G79-O□-□-D1	G70D-SOC16
				Α	2	G79-O□-□-D1	G70D-FOM16
CJ1W-OD233	32 outputs	1 MIL connector	NPN	Α	2	G79-O□-□-D1	G70D-VSOC16
				Α	2	G79-O□-□-D1	G70D-VFOM16
				Α	2	G79-O□-□-D1	G70A-ZOC16-3 and Relay
				Α	2	G79-O□-□-D1	G70R-SOC08
				Α	2	G79-O□-□-D1	G70D-SOC08
				Α	2	G79-O□-□-D1	G7TC-OC16
				Α	2	G79-O□-□-D1	G7TC-OC08
				Α	2	G79-O□-□-D1	G70D-SOC16
				Α	2	G79-O□-□-D1	G70D-FOM16
CJ1W-OD234	32 outputs	1 MIL connector	NPN	Α	2	G79-O□-□-D1	G70D-VSOC16
				Α	2	G79-O□-□-D1	G70D-VFOM16
				Α	2	G79-O□-□-D1	G70A-ZOC16-3 and Relay
				Α	2	G79-O□-□-D1	G70R-SOC08
			Α	2	G79-O□-□-D1	G70D-SOC08	
				В	2	G79-O□C-□	G7TC-OC16
				В	2	G79-O□C-□	G7TC-OC08
				В	2	G79-O□C-□	G70D-SOC16
				В	2	G79-O□C-□	G70D-FOM16
CJ1W-OD261	64 outputs	2 Fujitsu connectors	NPN	В	2	G79-O□C-□	G70D-VSOC16
				В	2	G79-O□C-□	G70D-VFOM16
				В	2	G79-O□C-□	G70A-ZOC16-3 and Relay
				В	2	G79-O□C-□	G70R-SOC08
				В	2	G79-O□C-□	G70D-SOC08
				В	2	G79-I□-□-D1	G7TC-OC16-1
		2 MIL connectors		В	2	G79-O□-□-D1	G70D-SOC16-1
CJ1W-OD262	64 outputs		PNP	В	2	G79-O□-□-D1	G70D-FOM16-1
				В	2	G79-O□-□-D1	G70A-ZOC16-4 and Relay
				В	2	G79-O□-□-D1	G7TC-OC16
				В	2	G79-O□-□-D1	G7TC-OC08
				В	2	G79-O□-□-D1	G70D-SOC16
				В	2	G79-O□-□-D1	G70D-FOM16
CJ1W-OD263	64 outputs	2 MIL connectors	NPN	В	2	G79-O□-□-D1	G70D-VSOC16
				В	2	G79-O□-□-D1	G70D-VFOM16
				В	2	G79-O□-□-D1	G70A-ZOC16-3 and Relay
				В	2	G79-O□-□-D1	G70R-SOC08
				В	2	G79-O□-□-D1	G70D-SOC08

Types of Connecting Cables

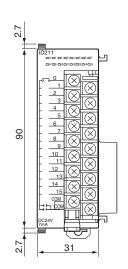
<i>,</i> .			
Cable length	G79-0□C-□	G79-O□-□-D1	G79-I□-□-D1
0.25m	_	_	_
0.5m	_	G79-O50-25-D1	G79-I50-25-D1
1.0m	G79-O100C-75	G79-O75-50-D1	G79-I75-50-D1
1.5m	G79-O150C-125	-	-
2.0m	G79-O200C-175	_	_
3.0m	G79-O300C-275	-	-
5.0m	G79-O500C-475	-	_

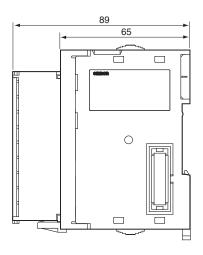
Dimensions (Unit: mm)

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

CJ1W-OC201/ OC211/ OA201/ OD201 / OD202/ OD203/ OD204/ OD211/ OD213 / OD212



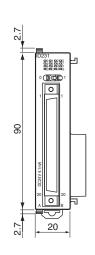


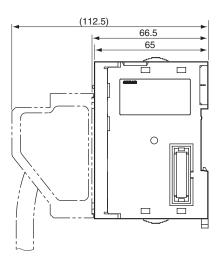


32-point Unit (Output Units)

With Fujitsu-Compatible Connector (40-pin \times 1) CJ1W-OD231

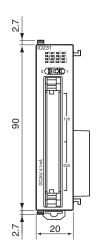


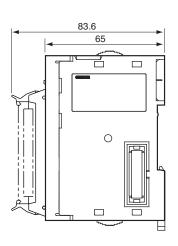




With MIL Connector (40-pin \times 1) CJ1W-OD232 / OD233 / OD234



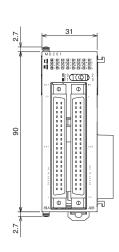


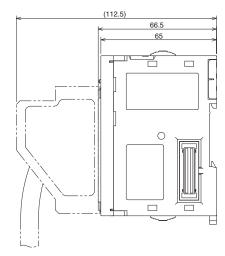


64-point Units (Output Units)

With Fujitsu-Compatible Connector (40-pin \times 2) CJ1W-OD261

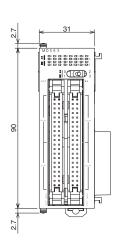


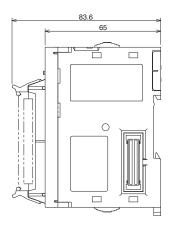




With MIL Connector (40-pin \times 2) CJ1W-OD262 / OD263







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).		
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).		

Terms and Conditions Agreement

Read and understand this catalog.

Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments.

Warranties.

- (a) Exclusive Warranty. Omron's exclusive warranty is that the Products will be free from defects in materials and workmanship for a period of twelve months from the date of sale by Omron (or such other period expressed in writing by Omron). Omron disclaims all other warranties, express or implied.
- (b) Limitations. OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCTS. BUYER ACKNOWLEDGES THAT IT ALONE HAS DETERMINED THAT THE

PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE.

Omron further disclaims all warranties and responsibility of any type for claims or expenses based on infringement by the Products or otherwise of any intellectual property right. (c) Buyer Remedy. Omron's sole obligation hereunder shall be, at Omron's election, to (i) replace (in the form originally shipped with Buyer responsible for labor charges for removal or replacement thereof) the non-complying Product, (ii) repair the non-complying Product, or (iii) repay or credit Buyer an amount equal to the purchase price of the non-complying Product; provided that in no event shall Omron be responsible for warranty, repair, indemnity or any other claims or expenses regarding the Products unless Omron's analysis confirms that the Products were properly handled, stored, installed and maintained and not subject to contamination, abuse, misuse or inappropriate modification. Return of any Products by Buyer must be approved in writing by Omron before shipment. Omron Companies shall not be liable for the suitability or unsuitability or the results from the use of Products in combination with any electrical or electronic components, circuits, system assemblies or any other materials or substances or environments. Any advice, recommendations or information given orally or in writing, are not to be construed as an amendment or addition to the above warranty.

See http://www.omron.com/global/ or contact your Omron representative for published information.

Limitation on Liability; Etc.

OMRON COMPANIES SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCTS, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE OR STRICT LIABILITY.

Further, in no event shall liability of Omron Companies exceed the individual price of the Product on which liability is asserted.

Suitability of Use.

Omron Companies shall not be responsible for conformity with any standards, codes or regulations which apply to the combination of the Product in the Buyer's application or use of the Product. At Buyer's request, Omron will provide applicable third party certification documents identifying ratings and limitations of use which apply to the Product. This information by itself is not sufficient for a complete determination of the suitability of the Product in combination with the end product, machine, system, or other application or use. Buyer shall be solely responsible for determining appropriateness of the particular Product with respect to Buyer's application, product or system. Buyer shall take application responsibility in all cases.

NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY OR IN LARGE QUANTITIES WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCT(S) IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

Programmable Products.

Omron Companies shall not be responsible for the user's programming of a programmable Product, or any consequence thereof.

Performance Data.

Data presented in Omron Company websites, catalogs and other materials is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of Omron's test conditions, and the user must correlate it to actual application requirements. Actual performance is subject to the Omron's Warranty and Limitations of Liability.

Change in Specifications.

Product specifications and accessories may be changed at any time based on improvements and other reasons. It is our practice to change part numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the Product may be changed without any notice. When in doubt, special part numbers may be assigned to fix or establish key specifications for your application. Please consult with your Omron's representative at any time to confirm actual specifications of purchased Product.

<u>Errors and Omissions.</u> <u>Information presented by Omron Companies has been checked and is believed to be accurate; however, no responsibility is accurate.</u> assumed for clerical, typographical or proofreading errors or omissions.

2014.9

In the interest of product improvement, specifications are subject to change without notice.



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Omron:

<u>G7TC-OC08 DC24V</u> <u>G70D-VSOC16 DC24</u> <u>G70D-SOC16-1 DC24</u> <u>G70D-VFOM16 DC24</u> <u>G7TC-OC16 DC12V</u> <u>G7TC-OC08-1 DC24V</u> <u>G7TC-ID16 DC24V</u> <u>G7TC-OC16 DC24V</u> <u>G70D-FOM16</u> <u>G70D-ET</u> <u>G7TC-OC08 DC12V</u> G70D-SOC16 DC24 G7TC-ID16-5 DC24 CJ1W-OD234 CJ1W-OD213