## **CPU Selection**

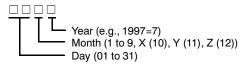
#### ■ CPU Rack

Name	Specifica	ations		Standards	Part number
CPUs (See note.)	I/O bits	Program capacity	Data memory capacity		
[ Nana)	5,120	250K steps	448K words (DM: 32K words, EM: 32K words ×13 banks)	N, L, UC, CE, CID2	CS1H-CPU67H
	5,120	120K steps	256K words (DM: 32K words, EM: 32K words ×7 banks)		CS1H-CPU66H
	5,120	60K steps	128K words (DM: 32K words, EM: 32K words $\times$ 3 banks)		CS1H-CPU65H
	5,120	30K steps	64K words (DM: 32K words, EM: 32K words ×1 bank)		CS1H-CPU64H
	5,120	20K steps	64K words (DM: 32K words, EM: 32K words ×1 bank)		CS1H-CPU63H
	5,120	60K steps	128K words (DM: 32K words, EM: 32K words $\times 3$ banks)		CS1G-CPU45H
	1,280	30K steps	64K words (DM: 32K words, EM: 32K words ×1 bank)		CS1G-CPU44H
	960	20K steps	64K words (DM: 32K words, EM: 32K words ×1 bank)		CS1G-CPU43H
	960	10K steps	64K words (DM: 32K words, EM: 32K words ×1 bank)		CS1G-CPU42H
CPU Backplanes	2 slots (E	Does not connec	U, C, N, L,	CS1W-BC022	
(for CS1 Units only)	3 slots		CE	CS1W-BC032	
	5 slots			CS1W-BC052	
	8 slots			CS1W-BC082	
	10 slots			CS1W-BC102	
CPU Backplanes	2 slots (E	Does not connec	t to Expansion Rack.)	U, C, N, L,	CS1W-BC023
	3 slots		CE	CS1W-BC033	
2	5 slots			CS1W-BC053	
jankanona 1 -	8 slots				CS1W-BC083
	10 slots			CS1W-BC103	
Power Supply Units	100 to 12	20 VAC or 200 to	240 VAC; Output capacity: 4.6 A, 5 VDC	U, C, N, L,	C200HW-PA204
(ana)	supply)	20 VAC or 200 to apacity: 4.6 A, 5	240 VAC (with 0.8 A, 24 VDC service power VDC	CE	C200HW-PA204S
_J//	100 to 12 4.6 A, 5 V		240 VAC (with RUN output) Output capacity:	U, C	C200HW-PA204R
	100 to 12 9 A, 5 VI		240 VAC (with RUN output) Output capacity:	U, C, N, L, CE	C200HW-PA209R
	24 VDC,	Output capacity	U, C, N, L, CE	C200HW-PD024	
I/O Control Unit	(2 termin		nnected over a distance of more than 12 m cluded. C200H Modules cannot be used on n Racks.)	U, C, CE, N	CS1W-IC102

(This table continues on the next page.)

 $\textbf{Note:} \quad \text{When using a CS1W-CN313 or CS1W-CN713 I/O Connecting Cable with a CS1$$\square$-CPU$$\square$$H CPU, use only Cables produced on the contraction of the contractio$ or after September 20, 2001 (production number 2091). Cables with no production number, or produced before September 20, 2001, cannot be used.

#### Reading the production number



**CPU Selection** 

#### **CPU Rack (continued)**

Name	Specifications		Standards	Part number				
Memory Cards	Flash memory, 15 MB		L, CE	HMC-EF172 (See note.)				
	Flash memory, 30 MB			HMC-EF372 (See note.)				
	Flash memory, 64 MB			HMC-EF672 (See note.)				
	Memory Card Adapter (for	r computer PCMIA slot)	CE	HMC-AP001				
Serial	2 × RS-232C ports, proto	ocol macro function	U, C, N, L,	CS1W-SCB21-V1				
Communications Boards	1 × RS-232C port + 1 ×	RS-422/485 port, protocol macro function	CE	CS1W-SCB41-V1				
Programming Consoles		et (CS1W-KS001-E) is required. ort on CPU Unit only. Cannot be connected to	U, C, N, CE	CQM1-PRO01-E				
	710 2020 port.)			C200H-PRO27-E				
Programming Console Key Sheet	For C200H-PRO27 and C	For C200H-PRO27 and CQM1-PRO01						
Programming Console Connecting	Connects the CQM1-PRC	001-E Programming Console. (Length: 0.05 m)		CS1W-CN114				
Cables	Connects the C200H-PRO	D27-E Programming Console. (Length: 2.0 m)		CS1W-CN224				
	Connects the C200H-PRO	Connects the C200H-PRO27-E Programming Console. (Length: 6.0 m)						
CX-Programmer	For 1 license		WS02-CXPC1-EV3					
	For 3 licenses		WS02-CXPC1-EV3 L03					
	For 10 licenses		WS02-CXPC1-EV3 L10					
Peripheral Device Connecting Cables	Connects DOS computers (Conversion cable to conn	CE	CS1W-CN118					
(for peripheral port)	Peripheral bus or Host Link	Connects DOS computers, D-Sub 9-pin (Length: 2.0 m)		CS1W-CN226				
		Connects DOS computers, D-Sub 9-pin (Length: 6.0 m)		CS1W-CN626				
Peripheral Device Connecting Cables	Peripheral bus or Host Link, antistatic	Connects DOS computers, D-Sub 9-pin (Length: 2.0 m)		XW2Z-200S-CV * CBL-202				
(for RS-232C port)		Connects DOS computers, D-Sub 9-pin (Length: 5.0 m)		XW2Z-500S-CV				
	Host Link	Connects DOS computers, D-Sub 9-pin (Length: 2.0 m)		XW2Z-200S-V * CBL-202				
		Connects DOS computers, D-Sub 9-pin (Length: 5.0 m)		XW2Z-500S-V				
CX-Simulator	Windows-based Support S on Windows 95, 98, Me, N	Software for simulating ladder program operation IT 4.0, 2000, or XP		WS02-SIMC1-E				
CX-Protocol	Windows-based Protocol NT 4.0, 2000, or XP	Creation Software for Windows 95, 98, Me,		WS02-PSTC1-E				
Battery Set	For CS1 Series only. (Inst production date.)	all a replacement battery within 2 years of the	L, CE	CS1W-BAT01				

Note: 1. HMC-EF172/EF372/EF672flash memory cannot be used with CS1G-CPU H, CS1H-CPU H, CJ1G-CPU H, or CJ1H-CPU H Modules predating lot number 020108 (i.e., manufactured before January 8, 2002) or with NS-7-series products predating lot number 0852 (i.e., manufactured before May 8, 2002) cannot be used together.

<sup>2. \*</sup> Indicates availability in Canada only.

### **Expansion Racks**

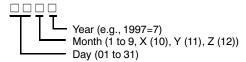
### **■** Expansion Racks

Name	Specifications		Standards	Part number
CS1 Expansion Backplanes	3 slots		U, C, N, L,	CS1W-BI032
(for CS1 Modules only)	5 slots		CE	CS1W-BI052
	8 slots		CS1W-BI082	
	10 slots			CS1W-BI102
CS1 Expansion Backplanes	3 slots		U, C, N, L,	CS1W-BI033
	5 slots		CE	CS1W-BI053
	8 slots			CS1W-BI083
	10 slots			CS1W-BI103
C200H Expansion I/O	3 slots		U, C, N, L,	C200HW-BI031
Backplanes	5 slots		CE	C200HW-BI051
	8 slots			C200HW-BI081-V1
	10 slots			C200HW-BI101-V1
Power Supply Modules	100 to 120 VAC or 200 to 240 VAC, Output cap 5 VDC	eacity: 4.6 A,		C200HW-PA204
	100 to 120 VAC or 200 to 240 VAC (with service 24 VDC), Output capacity: 4.6 A, 5 VDC	e supply: 0.8 A,		C200HW-PA204S
	100 to 120 VAC or 200 to 240 VAC (with RUN of Output capacity: 4.6 A, 5 VDC	output)	U, C	C200HW-PA204R
	24 VDC	U, C, N, L, CE	C200HW-PD024	
	100 to 120 VAC or 200 to 240 VAC (with RUN of Output capacity: 9 A, 5 VDC	output)	U, C, N, L, CE	C200HW-PA209R
I/O Interface Unit	For Expansion Racks connected over a distant 12 m. (C200H Modules cannot be used on Lon Expansion Racks.)		U, C, CE	CS1W-II102
CS1 I/O Connecting Cables	Connects CS1 Expansion I/O Backplanes	Length: 0.3 m	L, CE	CS1W-CN313
(See note.)	to CPU Backplanes or other CS1 Expansion	Length: 0.7 m		CS1W-CN713
	I/O Backplanes.	Length: 2 m		CS1W-CN223
		Length: 3 m		CS1W-CN323
		Length: 5 m		CS1W-CN523
		Length: 10 m		CS1W-CN133
		Length: 12 m		CS1W-CN133-B2
Long-distance Expansion	Connect I/O Control Unit to I/O Interface Unit	Length: 0.3 m	N, L, CE	CV500-CN312
Rack Cables	or connects two I/O Interface Modules	Length: 0.6 m	N, CE	CV500-CN612
		Length: 1 m		CV500-CN122
		Length: 2 m	CE	CV500-CN222
		Length: 3 m		CV500-CN322
		Length: 5 m		CV500-CN522
		Length: 10 m		CV500-CN132
		Length: 20 m		CV500-CN232
		Length: 30 m		CV500-CN332
			CV500-CN432	
		Length: 50 m		CV500-CN532

(This table continues on the next page.)

Note: When using a CS1W-CN313 or CS1W-CN713 I/O Connecting Cable with a CS1 — CPU — H CPU Unit, use only Cables produced on or after September 20, 2001 (production number 2091). Cables with no production number, or produced before September 20, 2001, cannot be used.





Basic I/O modules

#### **Expansion Racks (continued)**

Name	Specifications		Standards	Part number
CS1 to C200H I/O	Connects C200H Expansion I/O Backplanes	Length: 0.3 m	L, CE	CS1W-CN311
Connecting Cables	to CPU Backplanes or CS1 Expansion I/O Backplanes.	Length: 0.7 m		CS1W-CN711
	backplanes.	Length: 2 m		CS1W-CN221
		Length: 3 m		CS1W-CN321
		Length: 5 m		CS1W-CN521
		Length: 10 m		CS1W-CN131
		Length: 12 m		CS1W-CN131-B2
C200H I/O Connecting	Connects C200H Expansion I/O Backplanes	Length: 0.3 m	N, L, CE	C200H-CN311
Cables	to other C200H Expansion I/O Backplanes.	Length: 0.7 m		C200H-CN711
		Length: 2 m		C200H-CN221
		Length: 5 m	L, CE	C200H-CN521
		Length: 10 m		C200H-CN131

#### ■ C200H Basic I/O Modules

Name	Specifications	Mounta	able Racks				Bits	Standards	Part number
		CPU Rack	C200H Expansion I/O Racks	CS1 Expansion Racks	CS1 Long distance Racks	SYSMAC BUS Slave Racks	allocated (CIO 0000 to CIO 0319)		
DC Input Modules	12 to 24 VDC, 8 inputs	Yes	Yes	Yes	No	Yes	16	U, C, N, L, CE	C200H-ID211
himmin	24 VDC, 16 inputs	Yes	Yes	Yes	No	Yes	16		C200H-ID212
AC Input Modules	100 to 120 VAC, 8 inputs	Yes	Yes	Yes	No	Yes	16	U, C, N, L	C200H-IA121
	100 to 120 VAC, 16 inputs	Yes	Yes	Yes	No	Yes	16		C200H-IA122
	100 to 120 VAC, 16 inputs	Yes	Yes	Yes	No	Yes	16	CE	C200H-IA122V
	200 to 240 VAC, 8 inputs	Yes	Yes	Yes	No	Yes	16	U, C, N, L	C200H-IA221
	200 to 240 VAC, 16 inputs	Yes	Yes	Yes	No	Yes	16		C200H-IA222
	200 to 240 VAC, 16 inputs	Yes	Yes	Yes	No	Yes	16	CE	C200H-IA222V
AC/DC Input Modules	12 to 24 VAC/VDC, 8 inputs	Yes	Yes	Yes	No	Yes	16	U, C, N, L, CE	C200H-IM211
	24 VAC/VDC, 16 inputs	Yes	Yes	Yes	No	Yes	16		C200H-IM212
B7A Input Modules	16 inputs	Yes	Yes	Yes	No	Yes	16	U, C, CE	C200H-B7AI1
1 9999	32 inputs	Yes	Yes	Yes	No	No (See note 2.)	32	U, C	C200H-B7A12
Interrupt Input Unit	12 to 24 VDC, 8 inputs	Yes	Yes (See note 1.)	Yes (See note 1.)	No (See note 1.)	No	16	U, C, CE	C200HS-INT01

(This table continues on the next page.)

Note: 1. Interrupt Input Modules can only be used to input interrupts on the CPU Rack. They will function as normal I/O Modules on other Racks.

2. C200H-B7A12/02/21/22are C200H Group-2 Modules.

## Basic I/O Modules

#### C200H Basic I/O Modules (continued)

Name	Specifications	Mount	able Racks			Bits	Standards	Part number	
		CPU Rack	C200H Expansion I/O Racks	CS1 Expansion Racks	CS1 Long distance Racks	SYSMAC BUS Slave Racks	allocated (CIO 0000 to CIO 0319)		
Relay Bit Output	250 VAC/24 VDC, 2 A, 8 outputs max.	Yes	Yes	Yes	No	Yes	16	U, C, N	C200H-OC221
Modules	250 VAC/24 VDC, 2 A, 12 outputs max.	Yes	Yes	Yes	No	Yes	16		C200H-OC222
Princero	250 VAC/24 VDC, 2 A, 12 outputs max.	Yes	Yes	Yes	No	Yes	16	CE	C200H-OC222N
	250 VAC/24 VDC, 2 A, 16 outputs max.	Yes	Yes	Yes	No	Yes	16	U, C, N, L	C200H-OC225
	250 VAC/24 VDC, 2 A, 16 outputs max.	Yes	Yes	Yes	No	Yes	16	CE	C200H-OC226N
	250 VAC/24 VDC, 2 A, independent contacts, 5 outputs max.	Yes	Yes	Yes	No	Yes	16	U, C, N, L	C200H-OC223
	250 VAC/24 VDC, 2 A, independent contacts, 8 outputs max.	Yes	Yes	Yes	No	Yes	16		C200H-OC224
	250 VAC/24 VDC, 2 A, independent contacts, 8 outputs max.	Yes	Yes	Yes	No	Yes	16	CE	C200H-OC224N
Transistor Output	12 to 48 VDC, 1 A, 8 sinking outputs	Yes	Yes	Yes	No	Yes	16	U, C, N, L, CE	C200H-OD411
Modules	24 VDC, 2.1 A, 8 sinking outputs	Yes	Yes	Yes	No	Yes	16		C200H-OD213
	24 VDC, 0.8 A, 8 sourcing outputs, load short-circuit protection.	Yes	Yes	Yes	No	Yes	16	U, C, N, L	C200H-OD214
	5 to 24 VDC, 0.3 A, 8 sourcing outputs	Yes	Yes	Yes	No	Yes	16		C200H-OD216
	24 VDC, 0.3 A, 12 sinking outputs	Yes	Yes	Yes	No	Yes	16	U, C, N, L, CE	C200H-OD211
	5 to 24 VDC, 0.3 A, 12 sourcing outputs	Yes	Yes	Yes	No	Yes	16		C200H-OD217
	24 VDC, 0.3 A, 16 sinking outputs	Yes	Yes	Yes	No	Yes	16		C200H-OD212
	24 VDC, 1 A, 16 sourcing outputs, load short-circuit protection.	Yes	Yes	Yes	No	Yes	16	CE	C200H-OD21A
B7A Out- put Mod- ules	16 outputs	Yes	Yes	Yes	No	Yes	16	U, C, CE	C200H-B7AO1
	32 outputs	Yes	Yes	Yes	No	No (See note 2.)	32	U, C	C200H-B7A02

(This table continues on the next page.)

Note: 1. Interrupt Input Modules can only be used to input interrupts on the CPU Rack. They will function as normal I/O Modules on other Racks.

2. C200H-B7A12/02/21/22are C200H Group-2 Modules.

## High-density I/O Modules

#### C200H Basic I/O Modules (continued)

Name	Specifications	Mounta	able Racks				Bits allocated (CIO 0000 to CIO 0319)	Standards	Part number
		CPU Rack	C200H Expansion I/O Racks	CS1 Expansion Racks	CS1 Long distance Racks	SYSMAC BUS Slave Racks			
Triac Out- put Mod-	250 VAC, 1.2 A, 8 outputs	Yes	Yes	Yes	No	Yes	16	CE	C200H-OA223
ules	250 VAC, 0.3 A, 12 outputs	Yes	Yes	Yes	No	Yes	16		C200H-OA222V
Norman .	250 VAC, 0.5 A, 12 outputs	Yes	Yes	Yes	No	Yes	16	U, C, N, L	C200H-OA224
Analog Timer Unit	4-point timer	Yes	Yes	Yes	No	Yes	16	U, C	C200H-TM001
:::	External Variable Resistor Connector:								C4K-CN223

Note: 1. Interrupt Input Modules can only be used to input interrupts on the CPU Rack. They will function as normal I/O Modules on other Racks.

- 2. C200H-B7A12/02/21/22are C200H Group-2 Modules.
- 3. The C200H-ID001 (no-voltage contacts, 8 inputs, NPN) and C200H-ID002 (no-voltage contacts, 8 inputs, PNP) cannot be used.

### ■ C200H Group-2 High-density I/O Modules

Name	Specifications	Mount	able Racks				Bits	Standards	Part number
		CPU Rack	C200H Expansion I/O Racks	CS1 Expansion Racks	CS1 Long- distance Racks	SYSMAC BUS Slave Racks	allocated (CIO 0000 to CIO 0319)		
DC Input	24 VDC, 32 inputs	Yes	Yes	Yes	No	No	32	U, C, N, L,	C200H-ID216
Modules	24 VDC, 64 inputs	Yes	Yes	Yes	No	No	64	CE	C200H-ID217
	24 VDC, 32 inputs, 6 mA	Yes	Yes	Yes	No	No	32	U, C, CE	C200H-ID218
ka	24 VDC, 64 inputs, 6 mA	Yes	Yes	Yes	No	No	64		C200H-ID219
	12 VDC, 64 inputs	Yes	Yes	Yes	No	No	64	U, C	C200H-ID111
Transistor Output Modules	16 mA/4.5 V to 100 mA/26.4 V, 32 sinking outputs	Yes	Yes	Yes	No	No	32	U, C, N, L, CE	C200H-OD218
	0.5 A/ 24 VDC, 32 sourcing outputs, load short-circuit protection	Yes	Yes	Yes	No	No	32	U, C, CE	C200H-OD21B
	16 mA/4.5 V to 100 mA/26.4 V, 64 sinking outputs	Yes	Yes	Yes	No	No	64	U, C, N, L, CE	C200H-OD219
B7A Input Modules	32 inputs	Yes	Yes	Yes	No	No (See note.)	32	U, C	C200H-B7A12
B7A Out- put Mod- ules	32 outputs	Yes	Yes	Yes	No	No (See note.)	32		C200H-B7A02
B7A I/O Modules	16 inputs, 16 outputs	Yes	Yes	Yes	No	No (See note.)	16		C200H-B7A21
	32 inputs, 32 outputs	Yes	Yes	Yes	No	No (See note.)	32		C200H-B7A22

(This table continues on the next page.)

Note: The C200H-B7A12/02/21/22are C200H Group-2 Modules.

## High-Density I/O Modules

### ■ C200H Group-2 High-density I/O Modules

Part	Connection		Remarks	Standards	Part number
Applicable connector	Soldered (included with Unit)		From Fujitsu Socket: FCN-361J040-AU Connector bar: FCN-360C040-J2		C500-CE404
	Crimped		From Fujitsu Socket: FCN-363J040 Connector bar: FCN-360C040-J2 Contacts: FCN-363J-AU		C500-CE405
	Pressure welded		From Fujitsu: FCN-367J040-AU		C500-CE403
Terminal block connection parts	1:1 connections	Special Cable	For CS1W-ID231/ID261/OD231/		XW2Z-□□□B (See note 1.)
		Terminal Block Unit	OD232/OD261/OD262/MD2 61/ MD262 and C200H-ID216/ID217/ID218/I		XW2B-40G4
					XW2B-40G5
			D219/ID111/OD218/OD21B/ OD219		XW2D-40G6
	1:2 connections	Special Cable	OD219		XW2Z-□□□D (See notes 1 and 2.)
		Terminal Block Unit			XW2B-20G4
					XW2B-20G5
					XW2D-20G6
					XW2C-20G5-IN16

Note: 1. Refer to the XW2 Connector-Terminal Block Conversion Unit catalog for details. (Square boxes indicate the cable length.)

### ■ CS1 High-density I/O Modules

Name	Specifications	Mount	able Racks			Bits	Standards	Part number	
		CPU Rack	C200H Expansion I/O Racks	CS1 Expansion Racks	CS1 Long- distance Racks	SYSMAC BUS Slave Racks	allocated (CIO 0000 to CIO 0319)		
DC Input Modules	24 VDC, 16 inputs, 7 mA	Yes	No	Yes	Yes	No	16	UC, N, CE, CID2	CS1W-ID211
	24 VDC, 32 inputs, 6 mA	Yes	No	Yes	Yes	No	32		CS1W-ID231
	24 VDC, 64 inputs, 6 mA	Yes	No	Yes	Yes	No	64		CS1W-ID261
	24 VDC, 96 inputs, approx. 5 mA	Yes	No	Yes	Yes	No	96	U, C, N, L, CE	CS1W-ID291
AC Input Modules	100 to 120 VAC, 100 to 120 VDC, 16 inputs	Yes	No	Yes	Yes	No	16	UC, N, CE, CID2	CS1W-IA111
	200 to 240 VAC, 16 inputs	Yes	No	Yes	Yes	No	16	UC, N, CE	CS1W-IA211
Interrupt Input Unit	24 VDC, 16 inputs, 7 mA	Yes	No	Yes (See note.)	Yes (See note.)	No	16	UC, N, CE, CID2	CS1W-INT01
High- speed In- put Unit	24 VDC, 16 inputs, 7 mA	Yes	No	Yes	Yes	No	16		CS1W-IDP01
Safety Relay Unit	24 VDC, 2 channels with 4 inputs each, 4 pts/common	Yes	No	Yes	Yes	No	16	U, C, CE	CS1W-SF200

<sup>2.</sup> The XW2Z-\\_\\_\D, CS1W-OD\\_\, and C200H-OD\\_\ cannot be connected. Only the inputs of the CS1W-MD\\_\ can be connected.

# High-Density I/O Modules

### CS1 High-density I/O Modules (continued)

Name	Specifications	Mounta	able Racks				Bits	Standards	Part number
		CPU Rack	C200H Expansion I/O Racks	CS1 Expansion Racks	CS1 Long- distance Racks	SYSMAC BUS Slave Racks	allocated (CIO 0000 to CIO 0319)		
Relay Output Modules	250 VAC or 120 VDC, indepen- dent contacts, 8 outputs, 2 A	Yes	No	Yes	Yes	No	16	UC, N, CE, CID2	CS1W-OC201
	250 VAC or 120 VDC, 16 outputs, 2 A	Yes	No	Yes	Yes	No	16		CS1W-OC211
Transistor Output	12 to 24 VDC, 0.5 A, 16 sinking outputs	Yes	No	Yes	Yes	No	16	UC, N, CE, CID2	CS1W-OD211
Modules	24 VDC, 0.5 A, 16 sourcing outputs	Yes	No	Yes	Yes	No	16	U, C, N, CE	CS1W-OD212
	12 to 24 VDC, 0.5 A, 32 sinking outputs	Yes	No	Yes	Yes	No	32	U, C, N, CE, CID2	CS1W-OD231
	24 VDC, 0.5 A, 32 sourcing outputs	Yes	No	Yes	Yes	No	32	U, C, N, CE	CS1W-OD232
	12 to 24 VDC, 0.3 A, 64 sinking outputs	Yes	No	Yes	Yes	No	64	UC, N, CE, CID2	CS1W-OD261
	24 VDC, 0.3 A, 64 sourcing outputs	Yes	No	Yes	Yes	No	64		CS1W-OD262
	12 to 24 VDC, 0.1 A, 96 sinking outputs	Yes	No	Yes	Yes	No	96	U, C, N, L, CE	CS1W-OD291
	12 to 24 VDC, 0.1 A, 96 sourcing outputs	Yes	No	Yes	Yes	No	96		CS1W-OD292
Triac Output	250 VAC, 1.2 A, 8 outputs	Yes	No	Yes	Yes	No	16	UC, N, CE	CS1W-OA201
Unit	250 VAC, 0.5 A, 16 outputs	Yes	No	Yes	Yes	No	16		CS1W-OA211
DC Input/ Transistor Output Modules	24 VDC, 6 mA, 32 inputs, 12 to 24 VDC, 0.3 A, 32 sink- ing outputs	Yes	No	Yes	Yes	No	Inputs: 32 Outputs: 32	UC, N, CE, CID2	CS1W-MD261
	24 VDC, 6 mA, 32 inputs, 24 VDC, 0.3 A, 32 sourcing outputs	Yes	No	Yes	Yes	No	Inputs: 32 Outputs: 32	U, C, N, CE	CS1W-MD262
	5 VDC, 3.5 mA, 32 inputs, 5 VDC, 3.5 mA, 32 outputs	Yes	No	Yes	Yes	No	Inputs: 32 Outputs: 32	UC, N, CE	CS1W-MD561
	24 VDC, approx. 5 A, 48 inputs, 12 to 24 VDC, 0.1 A, 48 outputs, sinking inputs/outputs	Yes	No	Yes	Yes	No	Inputs: 48 Outputs: 48	U, C, N, L, CE	CS1W-MD291
	24 VDC, approx. 5 A, 48 inputs, 12 to 24 VDC, 0.1 A, 48 outputs, sourcing inputs/outputs	Yes	No	Yes	Yes	No	Inputs: 48 Outputs: 48		CS1W-MD292

Note: Interrupt input is not available when mounted on these Racks (i.e., used as normal I/O Unit).

## **CPU Selection**

### ■ Connectors for CS1 High-density I/O Modules

Part	Connection		Remarks	Standards	Part number
Applicable connectors	Soldered (included with Unit	)	From Fujitsu Socket: FCN-361J056-AU Connector bar: FCN-360C056-J3		CS1W-CE561
	Crimped		From Fujitsu Socket: FCN-363J056 Connector bar: FCN-360C056-J3 Contacts: FCN-363J-AU		CS1W-CE562
	Pressure welded		From Fujitsu: FCN-367J056-AU		CS1W-CE563
Terminal block	1:1	Special Cable	For CS1W-ID291/OD291/OD29		XW2Z-□□□H-1 (see note.)
		Terminal Block Unit	2/ MD291/MD292		XW2B-60G4
					XW2B-60G5
	1:2	Special Cable			XW2Z-□□□H-2 (see note.)
		Terminal Block Unit			XW2B-20G4
					XW2B-20G5
					XW2D-20G6
					XW2B-40G4
					XW2B-40G5
					XW2D-40G6
	1:3	Special Cable			XW2Z-□□□H-3 (see note.)
		Terminal Block Unit			XW2B-20G4
					XW2B-20G5
					XW2D-20G6

Note: Refer to the XW2 Connector-Terminal Block Conversion Unit catalog for details. (Square boxes indicate the cable length.)

### ■ C200H High-density I/O Modules Classified as Special I/O Modules

Name	Specifications	Mount	able Racks				Unit No	Standards	Part number
		CPU Rack	C200H Expansion I/O Racks	CS1 Expansion Racks	CS1 Long- distance Racks	SYSMAC BUS Slave Racks	NO		
DC Input Modules	24 VDC, 32 inputs	Yes	Yes	Yes	No	Yes	0 to 9	U, C, N, L, CE	C200H-ID215
TTL Input Modules	5 VDC, 32 inputs	Yes	Yes	Yes	No	Yes			C200H-ID501
Transistor Output Modules	24 VDC, 32 sinking outputs	Yes	Yes	Yes	No	Yes			C200H-OD215
TTL Output Modules	5 VDC, 32 sinking outputs	Yes	Yes	Yes	No	Yes			C200H-OD501
TTL I/O Modules	5 VDC, 16 inputs, 16 sinking outputs	Yes	Yes	Yes	No	Yes			C200H-MD501
DC Input/Transistor Output Modules	24 VDC, 16 inputs, 16 sinking outputs	Yes	Yes	Yes	No	Yes			C200H-MD215
	12 VDC, 16 inputs, 16 sinking outputs	Yes	Yes	Yes	No	Yes		U, C, N, L	C200H-MD115

# High-density I/O Modules

### ■ Connectors for C200H High-density I/O Modules

Part	Connection	Remarks	Standards	Part number
Applicable connectors	Soldered (included with Unit)	From Fujitsu Socket: FCN-361J024-AU Connector bar: FCN-360C024-J2		C500-CE241
	Crimped	From Fujitsu Socket: FCN-363J024 Connector bar: FCN-360C024-J2 Contacts: FCN-363J-AU		C500-CE242
	Pressure welded	From Fujitsu: FCN-367J024-AU/F		C500-CE243
Terminal block connection parts	Special Cable	For C200H-ID215/ID501/OD215		XW2Z-□□□A (See note.)
	Terminal Block Connector	/ MD115/MD215		XW2B-20G4
		For C200H-ID215/ID501/MD115		XW2B-20G5
		/ MD215/MD501		XW2D-20G6
		$\square\square\square$ = cable length		XW2B-20G5-D
				XW2B-40G5-T
	Special Cable			XW2Z-□□□A (see note)
	Terminal Block Connector			XW2C-20G6-IN16

**Note:** Refer to the XW2□ Connector-Terminal Block Conversion Unit catalog for details. (Square boxes indicate the cable length.)

### ■ C200H Special I/O Modules

Name	Specifications	Mountab	le Racks			Unit	Standards	Part number				
		CPU Rack	C200H Expansion I/O Racks	CS1 Expansion Racks	CS1 Long- distance Racks	SYSMAC BUS Slave Racks	No.					
Temperature Control Mod- ules	Thermocouple input, time-proportioning PID, or ON/OFF transistor output	Yes	Yes	Yes	No	Yes	0 to 9	U, C, CE	C200H-TC001			
	Thermocouple input, time-proportioning PID, or ON/OFF voltage output	Yes	Yes	Yes	No	Yes			C200H-TC002			
	Thermocou- ple input, PID current output	Yes	Yes	Yes	No	Yes			C200H-TC003			
	Temperature- resistance thermometer input, time- proportioning PID, or ON/ OFF transis- tor output	Yes	Yes	Yes	No	Yes						C200H-TC101
	Temperature- resistance thermometer input, time- proportioning PID, or ON/ OFF voltage output	Yes	Yes	Yes	No	Yes			C200H-TC102			
	Temperature- resistance thermometer input, PID current output	Yes	Yes	Yes	No	Yes			C200H-TC103			
Data Setting Console	Used with Temperature Control Modules. Monitoring, setting, and changing present values, set points, alarm values, PID parameters, bank numbers, etc.								C200H-DSC01			
	Connecting Cable, 2 m								C200H-CN225			
	Connecting Cable, 4 m								C200H-CN425			

### C200H Special I/O Modules (continued)

Name	Specifications	Mounta	ble Racks				Unit	Standards	Part number
		CPU Rack	C200H Expansion I/O Racks	CS1 Expansion Racks	CS1 Long- distance Racks	SYSMAC BUS Slave Racks	No.		
Heat/Cool Temperature Control Modules	Thermocouple input, time-proportioning PID, or ON/OFF transistor output	Yes	Yes	Yes	No	Yes	0 to 9	U, C, CE	C200H-TV001
Thermocouple input, time-proportioning PID, or ON/OFF voltage output  Thermocouple input, PID current output  Temperature-resistance thermometer input, time-proportioning PID, or ON/OFF transis-	ple input, time-propor- tioning PID, or ON/OFF voltage out-	Yes	Yes	Yes	No	Yes			C200H-TV002
	Yes	Yes	Yes	No	Yes			C200H-TV003	
	resistance thermometer input, time- proportioning PID, or ON/	Yes	Yes	Yes	No	Yes			C200H-TV101
	Temperature- resistance thermometer input, time- proportioning PID, or ON/ OFF voltage output	Yes	Yes	Yes	No	Yes			C200H-TV102
	Temperature- resistance thermometer input, PID current output	Yes	Yes	Yes	No	Yes			C200H-TV103
Temperature Sensor Modules	Thermocouple input, K/J selectable	Yes	Yes	Yes	No	Yes	0 to 9	U, C	C200H-TS001
	Thermocouple input, K/L selectable	Yes	Yes	Yes	No	Yes			C200H-TS002
T t t t t t t t t t t t t t t t t t t t	Temperature- resistance thermometer, JPt 100	Yes	Yes	Yes	No	Yes			C200H-TS101
	Temperature- resistance thermometer, Pt 100	Yes	Yes	Yes	No	Yes			C200H-TS102

### C200H Special I/O Modules (continued)

Name	Specifications	Mounta	ble Racks				Unit	Standards	Part number
		CPU Rack	C200H Expansion I/O Racks	CS1 Expansion Racks	CS1 Long- distance Racks	SYSMAC BUS Slave Racks	No.		
PID Control Modules	Voltage out- put/current input, time- proportioning PID, or ON/ OFF transis- tor output	Yes	Yes	Yes	No	Yes	0 to 9	U, C, CE	C200H-PID01
	Voltage out- put/current input, time- proportioning PID, or ON/ OFF voltage output	Yes	Yes	Yes	No	Yes			C200H-PID02
	Voltage out- put/current input, PID current out- put	Yes	Yes	Yes	No	Yes			C200H-PID03
Data Setting Console	Used with PID Control Modules.								C200H-DSC01
2000 1000 1000 1000 1000 1000 1000 1000	Monitoring, setting, and changing present values, set points, alarm values, PID parameters, bank numbers, etc.								
	Connecting Cable, 2 m								C200H-CN225
	Connecting Cable, 4 m								C200H-CN425
Cam Positioner Unit	48 cam outputs (16 external outputs and 32 internal outputs), Resolver speed: 20 μs (5 kHz)	Yes	Yes	Yes	No	Yes	0 to 9	U, C	C200H-CP114

### C200H Special I/O Modules (continued)

Name	Specifications	Mountab	ole Racks			Unit	Standards	Part number	
		CPU Rack	C200H Expansion I/O Racks	CS1 Expansion Racks	CS1 Long- distance Racks	SYSMAC BUS Slave Racks	No.		
Data Setting Console	Used with Cam Positioner Unit. Monitoring, setting, and changing present values, set points, alarm values, PID parameters, bank numbers, etc.								C200H-DSC01
	Connecting Cable, 2 m Connecting								C200H-CN225
ASCII Modules	Cable, 4 m  24-Kbyte RAM, 2 RS-232C ports	Yes	Yes	Yes	No	Yes	0 to F	U, C, CE	C200H-ASC02
	200-Kbyte RAM, 2 RS-232C ports	Yes	Yes	Yes	No	Yes			C200H-ASC11
	200-Kbyte RAM, RS-232C port, RS-422/485 port	Yes	Yes	Yes	No	Yes			C200H-ASC21
	200-Kbyte RAM, 3 RS-232C ports (1 ter- minal only)	Yes	Yes	Yes	No	Yes			C200H-ASC31
Analog Input Modules	4 to 20 mA, 1 to 5/0 to 10 V (select- able), 4 in- puts, 1/4,000 resolution	Yes	Yes	Yes	No	Yes	0 to 9	U, C, N, L	C200H-AD001
2 1 1 1 2 1 1 1 1 1	4 to 20 mA, 1 to 5/0 to 10 V/-10 to +10 V (select- able); 8 in- puts; 1/4,000 resolution	Yes	Yes	Yes	No	Yes	0 to F	0 to F U, C, N, L, CE	C200H-AD002
	4 to 20 mA, 1 to 5/0 to 10 V/-10 to +10 V (se- lectable); 8 inputs; 1/4,000 reso- lution	Yes	Yes	Yes	No	Yes			C200H-AD003

### C200H Special I/O Modules (continued)

Name	Specifications	Mounta	ble Racks				Unit	Standards	Part number
		CPU Rack	C200H Expansion I/O Racks	CS1 Expansion Racks	CS1 Long- distance Racks	SYSMAC BUS Slave Racks	No.		
put Modules	4 to 20 mA, 1 to 5/0 to 10 V (selectable); 2 outputs; 1/4,075 reso- lution	Yes	Yes	Yes	No	Yes	0 to 9	U, C, N, L	C200H-DA001
	4 to 20 mA, -10 to +10 V (selectable), 4 outputs; voltage: 1/8,190 current: 1/4,095	Yes	Yes	Yes	No	Yes	0 to F	U, C, N, L, CE	C200H-DA002
	1 to 5 V, -10 to +10 V (selectable), 8 outputs; 1/4,000 reso- lution	to 5 V, 10 to +10 V selectable), outputs; /4,000 reso-		C200H-DA003					
	4 to 20 mA, 8 outputs; 1/4,000 reso- lution	Yes	Yes	Yes	No	Yes			C200H-DA004
Analog I/O Modules	2 inputs (4 to 20 mA,1 to 5 V, etc.)	Yes	Yes	Yes	No	Yes			C200H-MAD01
	2 outputs (4 to 20 mA, 1 to 5 V, etc.)								

### C200H Special I/O Modules (continued)

Name	Specifications	Mounta	ble Racks				Unit	Standards	Part number
		CPU Rack	C200H Expansion I/O Racks	CS1 Expansion Racks	CS1 Long- distance Racks	SYSMAC BUS Slave Racks	No.		
High-speed Counter Modules	One-axis pulse input, counting rate: 50 kcps max.	Yes	Yes	Yes	No	Yes	0 to 9	U, C, CE	C200H-CT001-V1
pu corrat ma dri pa Tw pu corrat ma dri	One-axis pulse input, counting rate: 75 kcps max., line driver com- patible	Yes	Yes	Yes	No	Yes			C200H-CT002
	Two-axis pulse input, counting rate: 75 kcps max., line driver compatible	Yes	Yes	Yes	No	Yes	0 to F		C200H-CT021
	Solder terminal; 40p and a Connector Cover							C500-CE401	
	Solderless terminal; 40p and a Con- nector Cover (Crimped)						C500-CE402		
	Pressure welded ter- minal; 40p								C500-CE403
	Solder terminal; 40p and a Connector Cover (Horizontal-type)								C500-CE404
	Crimp-style terminal; 40p and a Con- nector Cover (Horizontal- type)								C500-CE405

### C200H Special I/O Modules (continued)

Name	Specifications	Mountal	ble Racks			Unit	Standards	Part number	
		CPU Rack	C200H Expansion I/O Racks	CS1 Expansion Racks	CS1 Long- distance Racks	SYSMAC BUS Slave Racks	No.		
Motion Control Modules	G-language program- mable, two- axis analog outputs	Yes	Yes	Yes	No	Yes	0 to F	U, C, CE	C200H-MC221
	MC Support Software							CV500-ZN3AT1-E	
-	IBM PC/AT or compat- ible								
	Connecting Cable: 3.3 m								CV500-CIF01
	Teaching Box							U, C, CE	CVM1-PRO01
	Connection cable for Teaching Box: 2 m long							CE	CV500-CN224
	Memory Pack							U, C, CE	CVM1-MP702
	Terminal Block Con- version							XW2B-20J6-6	
	Modulesim- plifies wiring.								
	Connecting Cable for Terminal Block Con- version Unit							XW2Z-100J-F1	
Position Control Mod- ules	One-axis pulse-train open-collec- tor output	Yes	Yes	Yes	No	Yes	0 to F	U, C, CE	C200HW-NC113
	Two-axis pulse-train open-collec- tor output	Yes	Yes	Yes	No	Yes			C200HW-NC213
7	Four-axis pulse-train open-collec- tor output	Yes	Yes	Yes	No	Yes			C200HW-NC413
1   S   I   F   F	NC Support Software (SYSMAC- NCT)		•					WS01-NCTF1-E	
	Peripheral Port Con- necting Cables for computer						CE	CS1W-CN226 (2 m)	

### C200H Special I/O Modules (continued)

Name	Specifications	Mounta	ble Racks			Unit	Standards	Part number	
		CPU Rack	C200H Expansion I/O Racks	CS1 Expansion Racks	CS1 Long- distance Racks	SYSMAC BUS Slave Racks	No.		
Position Control Mod- ules	Peripheral Port Con- necting Cables for computer							CE	CS1W-CN626 (6 m)
	RS-232C Port Con-								XW2Z-200S-CV (2 m) NCT V1.11 or earlier
~	necting Cables for computer								XW2Z-500S-CV (5 m) NCT V1.11 or earlier
	oompate.								XW2Z-200S (2 m) (See note 1.)
									XW2Z-500S (5 m) (See note 1.)
	1-axis Relay Unit for C200HW- NC113								XW2B-20J6-1B
	2-axis Relay Unit for C200HW- NC213/NC4 13							XW2B-40J6-2B	
	1-axis U, H, M Connect- ing Cables								XW2Z-050J-A6 (0.5 m) XW2Z-100J-A6 (1 m)
	for C200HW- NC113								XW22-1000-A0 (1 III)
	2-axis U, H, M Connect- ing Cables								XW2Z-050J-A7 (0.5 m)
	for C200HW- NC213/NC4 13								XW2Z-100J-A7 (1 m)
	1-axis UEP Connecting								XW2Z-050J-A8 (0.5 m)
	Cables for C200HW- NC113								XW2Z-100J-A8 (1 m)
	2-axis UEP Connecting Cables for								XW2Z-050J-A9 (0.5 m)
C	C200HW- NC213/NC4 13								XW2Z-100J-A9 (1 m)

(This table continues on the next page.)

Note 1. A 25-pin to 9-pin adapter is required to connected to a 9-pin, D-sub RS-232C connector on an IBM PC/AT or compatible.

### C200H Special I/O Modules (continued)

Name	Specifications	Mounta	ble Racks			Unit	Standards	Part number	
		CPU Rack	C200H Expansion I/O Racks	CS1 Expansion Racks	CS1 Long- distance Racks	SYSMAC BUS Slave Racks	No.		
ID Sensor Modules	Electromag- netic cou- pling	Yes	Yes	Yes	No	Yes	0 to 9	U, C	C200H-IDS01-V1
	Microwave type	Yes	Yes	Yes	No	Yes			C200H-IDS21
Fuzzy Logic Unit	Use with Fuzzy Sup- port Soft- ware	Yes	Yes	Yes	No	Yes	0 to 9	N	C200H-FZ001
	Fuzzy Sup- port Soft- ware (IBM PC/AT or compatible)								C500-SU981-E
DeviceNet Master Unit (See note 1.)	DeviceNet Remote I/O Master, 300 bits max.	Yes	Yes	Yes	No	No	0 to F	U, C, N, L, CE	C200HW-DRM21-V1
DeviceNet I/O Link Unit	DeviceNet Remote I/O Slave, 64 bits max.	Yes	Yes	Yes	No	No	0 to F	U, C, N, CE	C200HW-DRT21
Profibus-DP Master Unit	Profibus-DP Remote I/O Master, 30 words max.	Yes	Yes	Yes	No	No	0 to F	CE	C200HW-PRM21
Profibus-DP I/O Link Unit	Profibus-DP Remote I/O Slave, 100 words in max. 100 words out max.	Yes	Yes	Yes	No	No	0 to F	CE	C200HW-PRT21
CompoBus/ S Master Modules	CompoBus/ S Remote I/O, 256 bits max.	Yes	Yes	Yes	No	No	0 to F	U, C, N, L, CE	C200HW-SRM21-V1
PC Link Unit (See note 2.)	PC Link, single level: 32 Modules, multilevel: 16 Modules	Yes	Yes	Yes	No	No	0 to 9	N, L, CE	C200H-LK401

Note

- 1. The DeviceNet Slaves are allocated up to 2,048 I/O bits (100 words) in the DeviceNet Area.
- 2. PC Link Modules are allocated up to 1,024 bits (64 words) in the Link Area.

### ■ CS1 Special I/O Modules

Name	·	Mountab	le Racks				Unit	Standards	Part number
		CPU Rack	C200H Expansion I/O Racks	CS1 Expansion Racks	CS1 Long- distance Racks	SYSMAC BUS Slave Racks	No.		
Customizable Counter Modules	Pulse input: 2 pts Pulse output: 2 pts Contact input: 12 pts Contact output: 8 pts	Yes	No	Yes	Yes	No	0 to 95	U, C, CE	CS1W-HCP22
	Pulse input: 2 pts Analog output: 2 pts Contact input: 12 pts Contact output: 8 pts								CS1W-HCA22
	Contact input: 12 pts Contact output: 8 pts								CS1W-HIO01
ID Sensor Modules	Single head unit	Yes	No	Yes	Yes	No	0 to 95	U, CE	CS1W-V600C11
	Double head unit	Yes	No	Yes	Yes	No	0 to 94	U, CE	CS1W-V600C12
Analog Input Modules	4 inputs (1 to 5 V, 0 to 5 V, 0 to 10 V, -10 to 10 V, 4 to 20 mA) Reso- lution: 1/4,000	Yes	No	Yes	Yes	No	0 to 95	UC, N, L, CE, CID2	CS1W- AD041-V1
	8 inputs (1 to 5 V, 0 to 5 V, 0 to 10 V, -10 to 10 V, 4 to 20 mA) Reso- lution: 1/4,000	Yes	No	Yes	Yes	No	0 to 95	UC, N, L, CE, CID2	CS1W- AD081-V1
Analog Output Modules	4 outputs (1 to 5 V, 0 to 5 V, 0 to 10 V, -10 to 10 V, 4 to 20 mA) Resolution: 1/4,000								CS1W-DA041
	8 outputs (1 to 5 V, 0 to 5 V, 0 to 10 V, -10 to 10 V, 4 to 20 mA) Reso- lution: 1/4,000							U, C, N, L, CE	CS1W-DA08V
	8 outputs (4 to 20 mA) Resolution: 1/4,000								CS1W-DA08C
Analog I/O Unit	4 inputs (4 to 20 mA, 1 to 5 V, etc.) 4 outputs (1 to 5 V, 0 to 10 V, etc.)								CS1W-MAD44

### CS1 Special I/O Modules (continued)

Name	Specifications	Mountable Racks				Unit	Standards	Part number			
		CPU Rack	C200H Expansion I/O Racks	CS1 Expansion Racks	CS1 Long- distance Racks	SYSMAC BUS Slave Racks	No.				
Process I/O Modules											
Isolated Thermocouple Input Unit	4 inputs, B, E, J, K, N, R, S, T ±80 mV	Yes	No	Yes	Yes	No	0 to 95	UC, CE, CID2	CS1W-PTS01-V1		
Isolated Temperature- resistance Thermometer Input Unit	4 inputs, Pt100, JPt										CS1W-PTS02
Isolated Temperature- resistance Thermometer Input Unit (Ni508.4 Ω)	4 inputs, Ni508.4Ω		to to 5						CS1W-PTS03		
Isolated Two-wire Transmission Device Input Unit	4 inputs, 4 to 20 mA, 1 to 5 V									CS1W-PTW01	
Isolated DC Input Unit	4 inputs, 4 to 20 mA, 1 to 5 V, 0 to 5 V, ±5 V, 0 to 10 V, ±10 V					-					
Isolated Pulse Input Unit	4 inputs								CS1W-PPS01		
Isolated Control Output Unit	4 outputs, 4 to 20 mA, 1 to 5 V									CS1W-PMV01	
Power Transducer Input Unit	8 inputs, 0 to 1 mA, ±1 mA										CS1W-PTR01
100-mV DC Input Unit	8 inputs, 0 to 100 mA, ±100 mV								CS1W-PTR02		
Support Software	Setting tool software for the Proces- sing I/O Mod- ules, OS: Windows 95, 98, NT 4.0 (see note)								WS02-PUTC1-E		

#### CS1 Special I/O Modules (continued)

Name	Specifications	Mounta	ble Racks				Unit	Standards	Part number
		CPU Rack	C200H Expansion I/O Racks	CS1 Expansion Racks	CS1 Long- distance Racks	SYSMAC BUS Slave Racks	No.		
High-speed Counter Mod- ules	Pulse input: 2 pts Counting speed: 500 kcps max.	Yes	No	Yes	Yes	No	0 to 92	U, C, CE	CS1W-CT021
	Pulse input: 4 pts Counting speed: 500 kcps max.								CS1W-CT041
	SSI encoder input: 2 pts counting speed: 1.5 mHz max.	Yes	No	Yes	Yes	No	0 to 94	CE	CS1W-CTS21
Motion Control Modules	4 axes, analog outputs, G language	Yes	No	Yes	Yes	No	0 to 93	U, C, CE	CS1W-MC421
	2 axes, ana- log outputs, G language								CS1W-MC221
MC Support Software	Windows 95, 98, or NT								WS02-MCTC1- EV2
Computer Con- necting Cables	Peripheral port on CPU							CE	CS1W-CN226 (2 m)
	Unit								CS1W-CN626 (6 m)
	RS-232C port on CPU Unit								XW2Z-200S-CV (2 m)
									XW2Z-500S-CV (5 m)
Teaching Box								U, C, CE	CVM1-PRO01
Teaching Box Co Cable (2 m)	nnecting							CE	CV500-CN224
Memory Pack								U, C, CE	CVM1-MP702
MC Terminal Bloo Unit for 2 Axes (s wiring I/O connect	simplifies								XW2B-20J6-6
MC Terminal Bloc Unit for 4 Axes (s wiring I/O conne	simplifies								XW2B-40J6-7
MC Terminal Bloc Unit Cable	ck Conversion								XW2Z-100J-F1

Note: Setting tool software for the Processing I/O Modules also supports CS1W-AD \_\_\_, CS1WS-DA \_\_\_, and CS1W-MAD44.

## **CPU** Bus Modules

### **CS1 CPU Bus Modules (Continued)**

Name	Specifications	Mount	able Racks				Words	Unit	Standards	Part number
		CPU Rack	C200H Expansion I/O Racks	CS1 Expansion Racks	CS1 Long- distance Racks	SYSMAC BUS Slave Racks	allocated (CIO 1500 to CIO 1899)	No.		
Controller	Twisted pair	Yes	No	Yes	Yes	No	25 words	0 to	UC, N, L,	CS1W-CLK21-V1
Link Mod- ules	Optical ring (H-PCF cable)	Yes	No	Yes	Yes	No	25 words	F	CE, CID2	CS1W-CLK12-V1
	Optical ring (GI cable)	Yes	No	Yes	Yes	No	25 words			CS1W-CLK52-V1
Controller Link Sup- port Board	For PCI Bus (wire type), with Support Software								CE	3G8F7-CLK21-EV1
	For PCI Bus (H-PCF optical type), with Support Software				3G8F7-CLK12-EV1					
	For PCI Bus (GI optical type)									3G8F7-CLK52-EV1
SYSMAC LINK Mod- ules	Coaxial cable (5C-2V cable)	Yes	No	Yes	Yes	No	25 words	0 to F	U, C, CE	CS1W-SLK21
	Optical cable (H-PCF cable)						25 words		U, C, N, CE	CS1W-SLK11
SYSMAC LINK Sup- port Boards	For PCI Bus (coaxial type), with Support Software								CE	3G8F7-SLK21-E
	For PCI Bus (H-PCF opti- cal type), with Support Software									3G8F7-SLK11-E
Serial Com- munications Unit	Two RS-232C Ports	Yes	No	Yes	Yes	No	25 words	0 to F	U, C, N, L, CE	CS1W-SCU21-V1
RS-232C- RS-422A Conversion Unit	1 RS-232C port and 1 RS-422A terminal block									NT-AL001
Ethernet Unit	100Base-TX	Yes	No	Yes	Yes	No	25 words	0 to F	UC, CE, CID2	CS1W-ETN21
DeviceNet Unit	Functions as master and/or slave; allows con- trol of 2,048 points max. per master.	Yes	No	Yes	Yes	No		0 to F	U, C, CE	CS1W-DRM21

**CPU Bus Modules** 

### **CS1 CPU Bus Modules (continued)**

Name	Specifications	Mount	table Racks				Words	Unit	Standards	Part number
		CPU Rack	C200H Expansion I/O Racks	CS1 Expansion Racks	CS1 Long- distance Racks	SYSMAC BUS Slave Racks	allocated (CIO 1500 to CIO 1899)	No.		
CX- Process	For Loop Control Unit, Programming Tool and Monitor Tool software, OS for Tool: Windows 95, 98, NT 4.0, OS for Monitor: Windows NT 4.0 (License key sold separately)									WS02-LCTC1-E
License Key for Monitor Software	Hardware key for Monitor software, with license									WS02-LCTK1-EL01
Peripheral Device Connect- ing Cables (for pe- ripheral port)	Connects DOS comput- ers, D-Sub 9-pin recep- tacle (Length: 0.1 m) (Con- version cable to connect RS-232C cable to pe- ripheral port)								CE	CS1W-CN118
	Peripheral bus or Host Link, Connects DOS comput- ers, D-Sub 9-pin (Length: 2.0 m)									CS1W-CN226
	Peripheral bus or Host Link, Connects DOS comput- ers, D-Sub 9-pin (Length: 6.0 m)									CS1W-CN626
Peripheral Device Connect- ing Cables (for RS-232C	Peripheral bus or Host Link, Connects DOS comput- ers, D-Sub 9-pin (Length: 2.0									C200H-CN229-EU CBL-202*
port) USB to Serial 9-pin Adapter	m)  Converts PC USB port to a PC serial 9-pin port for use with Omron serial cables									CS1W-C1F31

<sup>\*</sup> Available in Canada only.

## DeviceNet

### **■** DeviceNet Configurator

Name	Specifications	Standards	Part number
DeviceNet Configurator	Software only (Windows 95, 98, NT 4.0, or 2000)		WS02-CFDC1-E
	ISA board with software (Windows 95, 98, or NT 4.0)		3G8F5-DRM21-E
	PC card with software (Windows 95, 98, ME, 2000, XP)		3G8E2-DRM21-EV1

### **■** Setting and Monitoring Software

Name	Specifications	Standards	Part number
NX-Server	DDE edition		WS02-NXD1-E

### ■ DeviceNet Slaves

Slave	Specifications		Standards	Part number
Programmable Slaves	Controller with SYSMAC CPM2C CPU No. of remote I/O link points: 1,024	4 transistor outputs (sinking)	U, C, CE	CPM2C-S100C-DRT
	max. Provides CompoBus/S Master.	4 transistor outputs (sourcing)		CPM2C-S110C-DRT
I/O Link Modules		512 internal outputs (between G/HE PLC and Master)		C200HW-DRT21
	16 internal inputs/1 CQM1/CQM1H PL	6 internal outputs (between C and Master)		CQM1-DRT21
	32 internal inputs/3 CPM1A/CPM2A PL	2 internal outputs (between .C and Master)		CPM1A-DRT21
Remote Transistor I/O Terminals	8 inputs (NPN, + co	ommon)		DRT1-ID08
	8 inputs (PNP, - co	mmon)		DRT1-ID08-1
	8 outputs (NPN, - o	common)		DRT1-OD08
	8 outputs (PNP, + c	ommon)		DRT1-OD08-1
	16 inputs (NPN, + o	common)		DRT1-ID16
	16 inputs (PNP, - c	ommon)		DRT1-ID16-1
	16 outputs (NPN, -	common)		DRT1-OD16
	16 outputs (PNP, +	common)		DRT1-OD16-1
	8 input points (NPN 8 input points (NPN			DRT1-MD16

## **DeviceNet Slaves**

### **DeviceNet Slaves (continued)**

Slave		Specifications	Standards	Part number
Remote	Common power	16 input points (NPN with + common)		DRT1-ID16TA
Transistor I/O Terminals	supply for communications and	16 input points (PNP with - common)		DRT1-ID16TA-1
with 3-tier Terminal	internal circuits	8 input points (NPN with + common) 8 output points (NPN with - common)		DRT1-MD16TA
Block		8 input points (PNP with – common) 8 output points (PNP with + common)		DRT1-MD16TA-1
		16 output points (NPN with - common)		DRT1-OD16TA
		16 output points (PNP with + common)		DRT1-OD16TA-1
	Separate power	16 inputs (NPN, + common) CE		DRT1-ID16T
	supplies for communications and	16 inputs (PNP, - common)		DRT1-ID16T-1
	internal circuits	16 I/O (NPN, - common)		DRT1-MD16T
		16 I/O (PNP, + common)		DRT1-MD16T-1
		16 outputs (NPN, - common)		DRT1-OD16T
		16 outputs (PNP, + common)		DRT1-OD16T-1
	istor I/O Terminals with	32 inputs (NPN, + common)		DRT1-ID32ML
Connectors		32 inputs (PNP, - common)		DRT1-ID32ML-1
		32 outputs (NPN, - common)		DRT1-OD32ML
		32 outputs (PNP, + common)		DRT1-OD32ML-1
		32 I/O (NPN, - common)		DRT1-MD32ML
		32 I/O (PNP, + common)		DRT1-MD32ML-1
	Mounting Bracket B			SRT2-ATT02
Remote Adapt	ers	16 inputs (NPN, + common)	U, C, CE	DRT1-ID16X
		16 inputs (PNP, - common)		DRT1-ID16X-1
		16 outputs (NPN, - common)		DRT1-OD16X
		16 outputs (PNP, + common)		DRT1-OD16X-1
	Flat Cable	Straight DIP pins		XG4A-2031
	Connectors with MIL Plugs	L-shaped DIP pins		XG4A-2034
DeviceNet Fibe Communicatio	er Amplifier Sensor ns Unit	Connects to up to 16 Fiber Amplifier Modules for the E3X-DA-N		E3X-DRT21
		Fiber Amplifier Unit (See note 1.)		E3X-DA6-P
		Reduced-wiring Connector (See note 1.)		E3X-CN02
		Terminal Unit		E39-TM1
Sensor Termin	als (for 2-wire	8 sensor I/O points (NPN), 2 inputs per Sensor		DRT1-HD16S
Sensors)		8 sensor I/O points (PNP)		DRT1-ND16S
	Cable Connectors	0.3 to 0.5 mm <sup>2</sup> (See note 2.)		XS8A-0441
		0.14 to 0.2 mm <sup>2</sup> (See note 2.)		XS8A-0442

## **DeviceNet Slaves**

### **DeviceNet Slaves (continued)**

Slave	Specifications		Standards	Part number
Water-resistant Terminals (transistor	4 inputs (NPN, + co	ommon)	CE	DRT1-ID04CL
I/O)	4 inputs (PNP, - co	mmon)		DRT1-ID04CL-1
	8 inputs (NPN, + co	ommon)		DRT1-ID08CL
	8 inputs (PNP, - co	mmon)		DRT1-ID08CL-1
	4 outputs (NPN, - o	common)		DRT1-OD04CL
	4 outputs (PNP, + c	common)		DRT1-OD04CL-1
	8 outputs (NPN, - o	common)		DRT1-OD08CL
	8 outputs (PNP, + c	common)		DRT1-OD08CL-1
Environmentally Resistant Transistor	8 inputs (NPN, + co	ommon)		DRT1-ID08C
I/O Terminals	16 inputs (NPN, + o	common)		DRT1-HD16C
	16 inputs (PNP, - c	ommon)		DRT1-HD16C-1
	8 outputs (NPN, - o	common)		DRT1-OD08C
	16 outputs (NPN, -	common)		DRT1-WD16C
	16 outputs (PNP, +	common)		DRT1-WD16C-1
	8 inputs/8 outputs (NPN, + common/-	· common)		DRT1-MD16C
	8 inputs/8 outputs (PNP, - common/+	common)	-	DRT1-MD16C-1
B7AC Interface Terminal	3 sets of 10 inputs Terminals)	(branching to 3 B7AC Link	U, C, CE	DRT1-B7AC
Analog Input Terminals	2 or 4 inputs (2 or 4 (voltage or current)	words)	CE	DRT1-AD04
	4 inputs (4 words) (voltage or current)		-	DRT1-AD04H
Analog Output Terminals	2 outputs	Current: 0 to 20 mA, 4 to 20 mA	1	DRT1-DA02
•	(2 words)	Voltage: 1 to 5 V, 0 to 10 V, - 10 to 10 V		
Temperature Input Terminals	4 inputs (4 words)	Inputs: R, S, K1, K2, J1, J2, T, E, B, N, L1, L2, U, W, PLII	-	DRT1-TS04T
		Inputs: Pt100, JPt100	1	DRT1-TS04P
RS-232C Unit	Two RS-232C ports	s, 16 inputs (signal status)	U, C, CE	DRT1-232C

DeviceNet I/O Terminals

### ■ Smart DeviceNet I/O Terminals

#### **Basic Modules**

Product	Specifications		Standards	Part number
Smart I/O basic Modules automatically	16 inputs	NPN	cULus, CE	DRT2-ID16
collect network status and connected device performance information	16 inputs	PNP		DRT2-ID16-1
device performance information	16 outputs	NPN		DRT2-OD16
	16 outputs	PNP		DRT2-OD16-1
3-tier Terminal Block Types	16 inputs	NPN		DRT2-ID16TA
	16 inputs	PNP		DRT2-ID16TA-1
	16 outputs	NPN		DRT2-OD16TA
	16 outputs	PNP		DRT2-OD16TA-1
	8 inputs 8 outputs	NPN NPN		DRT2-MD16TA
	8 inputs 8 outputs	PNP PNP		DRT2-MD16TA-1
MIL Connector Terminal Block Types	32 inputs	NPN		DRT2-ID32ML
	32 inputs	PNP		DRT2-ID32ML-1
	32 outputs	NPN		DRT2-OD32ML
	32 outputs	PNP		DRT2-OD32ML-1
	16 inputs 16 outputs	NPN NPN	_	DRT2-MD32ML
	16 inputs 16 outputs	PNP PNP		DRT2-MD32ML-1
Relay Output Terminal Block	16 relay outputs			DRT2-ROS16

### **Expansion Modules**

Product	Specifications		Standards	Part number
Smart expansion I/O Modules provide mix and match flexibility in distributed I/O configuration	8 inputs	NPN	cULus, CE	XWT-ID08
	8 inputs	PNP		XWT-ID08-1
	8 outputs	NPN		XWT-OD08
	8 outputs	PNP		XWT-OD08-1
	16 inputs	NPN		XWT-ID16
	16 inputs	PNP		XWT-ID16-1
	16 outputs	NPN		XWT-OD16
	16 outputs	PNP		XWT-OD16-1

### Analog I/O Terminal

Product	Specifications		Standards	Part number
Analog Input Terminal	4 inputs (0 to 5 V, 1 to 5 V, 0 to 10 V, $\pm$ 10 V, 0 to 20 mA, 4 to 20 mA)	Resolution: 12 bit; 1/6000; 4 ms max./4 pt conversion time	cULus, CE, CL1 Div2	DRT2-AD04
Analog Output Terminal	2 outputs (0 to 5 V, 1 to 5 V, 0 to 10 V, $\pm$ 10 V, 0 to 20 mA, 4 to 20 mA)	Resolution: 12 bit; 6000; 2 ms/pt conversion time		DDRT2-DA02

### **DeviceNet Enhanced Products**

#### **IP67 Rated Transistor Terminals with M12 Connectors**

Product	Specifications		Standards	Part number
Terminals with IP67-rated water-washdown resistance	16 inputs	NPN	cULus, CE	DRT2-HD16C
	16 inputs	PNP		DRT2-HD16C-1
	8 inputs	NPN		DRT2-ID08C
	8 inputs	PNP		DRT2-ID08C-1
	8 outputs	NPN		DRT2-OD08C
	8 outputs	PNP		DRT2-OD08C-1

### **■** DeviceNet Enhanced Products

Product	Specifications		Standards	Part number
Vision sensors	Single camera system		CE	F150-C10E-2-DRT
	Two camera system		CE	F150-C10E-3-DRT
Operator interface terminal adapter for NT31/NT631 touch screens	Combined with CS1 slave terminals/network; with Coterminals/network		cULus, CE	NT-DRT21
Communications module for fiber-optic sensor block	Up to 16 E3X-DA-N ampli sensor input slave block	ifiers form a wire saving	cRUus	E3X-DRT21
Temperature/process controllers, single loop, 1/8 DIN	Controller with LED displacement output modules; to alarm, order a current trans	use a heater burnout	RU, CSA, CE	E5EK-AA2-DRT21
Multi-zone temperature controller, 8 loops, optional display unit	Heating mode, voltage output, heater open circuit	Thermo-couple RTD	CE	E5EZ-8AQHD1TCB-V2 E5ZE-8AQHD1PB-V2
	Heating mode, voltage output,	Thermo-couple RTD	CE	E5EZ-8AQAD1TCB-V2 E5ZE-8AQAD1PB-V2
	Heating mode, voltage output,	Thermo-couple RTD	CE	E5EZ-8ACAD1TCB-V2 E5ZE-8ACAD1PB-V2
	Heating mode, voltage output, heater open circuit	Thermo-couple RTD	CE	E5EZ-8VQHD1TCB-V2 E5ZE-8VQHD1PB-V2
	Heating mode, voltage output,	Thermo-couple RTD	CE	E5EZ-8VQAD1TCB-V2 E5ZE-8VQAD1PB-V2
	Heating mode, voltage output,	Thermo-couple RTD	CE	E5EZ-8VCAD1TCB-V2 E5ZE-8VCAD1PB-V2
Communications module for multi-loop (2 to 32) plug-in temperature controller	Set parameters and montitor status via DeviceNet for all loops		cRUus, CE	E5EK-AA2-DRT21
Intelligent flag ID system	Set addresses and monitor work-in-process based on unique ID via DeviceNet: reads 24 bits of data max.: writes 16 bits of data max.		cRUus, CE	V600-HAM42-DRT
	M12 threaded sensing head		-	V600-HS51
	30.5 x 18 x 10 mm head		-	V600-HS61
	53 x 50 x 23 mm head		-	V600-HS63
	100 x 100 x 30 mm head		-	V600-HS67
AC inverter, MV-series adapter	Monitor Run/Stop and operating conditions and make changes in set values from a PLC via DeviceNet using this adapter for all 3G3MV inverters		RU, CSA, CE	3G3MV-PDRT2
AC inverter, G5-series adapter	Monitor Run/Stop and operating conditions and make changes in set values from a PLC via DeviceNet using this adapter for all G5 inverters		cRUus	SI-N1
AC inverter, RV-series adapter	Monitor Run/Stop and operating conditions and make changes in set values from a PLC via DeviceNet using this adapter for all RV inverters		cRUus	3G3RV-PDRT2

## **DeviceNet Enhanced Products**

#### **DeviceNet Enhanced Products (continued)**

Product	Specifications	Standards	Part number
Servo drive, W-series adapter	Communicate positioning commands, drive parameters, positioning data, motor characteristics etc, between the W-series servo and a DeviceNet master. Commands received via DeviceNet are output to the W-series servo drive	cULus, CE	R88A-NCW152-DRT
High-Density Temperature Controller	DeviceNet-compatible 8-loop Temperature Controller		E5ZE-8□D1-□B-V2
Multi-function Compact Inverter DeviceNet Communications Unit	DeviceNet Communications Unit for the 3G3MV AC Inverters		3G3MV-PDRT1-SINV
High-Function General-purpose Inverter DeviceNet Communications Module	DeviceNet Communications Unit for the 3G3RV and 3G3FV AC Inverters		3G3FV-PDRT1-SIN
Vision Sensor Controller	DeviceNet-compatible F150-3 Vision System		F150-C10V3-DRT
Super-compact Signal Converter Bases	DeviceNet-compatible Bases		K3FM-BI□/BO□
DeviceNet Wireless	DeviceNet Wireless Master Module		WD30-ME
Modules	1600 input/1600 output bits		WD30-ME01
	DeviceNet Wireless Slave Module 512 input/512 output bits		WD30-SE
			WD30-SE01

**Note:** 1. Order Fiber Amplifier Modules and Reduced-wiring Connectors as sets.

<sup>2.</sup> XS8A-0441 and XS8A-0442 Connectors are packed in sets of 10. Order these Connectors in multiples of 10.

# DeviceNet Multiple I/O Terminal Modules

### ■ DeviceNet Multiple I/O Terminal Modules

Name		I/O points	Specifications	Standards	Part number
Communications Unit			Total Slave I/O points: 1,024 max.	U, C, CE	DRT1-COM
Digital I/O	Modules with Terminal	16 inputs	NPN (+ common)		GT1-ID16
Modules	Blocks	16 inputs	PNP (- common)		GT1-ID16-1
		16 outputs	NPN (- common)		GT1-OD16
		16 outputs	PNP (+ common)		GT1-OD16-1
	Modules with MOLEX	16 inputs	NPN (+ common)		GT1-ID16MX
	Connectors	16 inputs	PNP (- common)		GT1-ID16MX-1
		16 outputs	NPN (- common)		GT1-OD16MX
		16 outputs	PNP (+ common)		GT1-OD16MX-1
	Modules with Fujitsu	16 inputs	NPN (+ common)		GT1-ID16ML
	Connectors	16 inputs	PNP (- common)		GT1-ID16ML-1
		16 outputs	NPN (- common)		GT1-OD16ML
		16 outputs	PNP (+ common)		GT1-OD16ML-1
	Modules with D-Sub	16 inputs	NPN (+ common)		GT1-ID16DS
	25-pin Connectors	16 inputs	PNP (- common)		GT1-ID16DS-1
		16 outputs	NPN (- common)		GT1-OD16DS
Modules with		16 outputs	PNP (+ common)		GT1-OD16DS-1
		32 inputs	NPN (+ common)		GT1-ID32ML
	High-density Fujitsu Connectors	32 inputs	PNP (- common)		GT1-ID32ML-1
	Commodoro	32 outputs	NPN (- common)		GT1-OD32ML
		32 outputs	PNP (+ common)		GT1-OD32ML-1
Analog Input Mo	odules	8 inputs	MOLEX connector		GT1-AD08MX
		4 inputs	Terminal block		GT1-AD04
Analog Output N	Modules	4 outputs	MOLEX connector		GT1-DA04MX
		4 outputs	Terminal block		GT1-DA04
Temperature Inp	out Modules	4 inputs	Thermocouple		GT1-TS04T
		4 inputs	Platinum resistance thermometer		GT1-TS04P
Counter Unit		1 input, 2 outputs	1 input, 2 outputs Counter Unit with encoder input	CE	GT1-CT01
Relay Output Modules		8 outputs	8 relay outputs, 2A, SPST-NO	U, C, CE	GT1-ROP08
		16 outputs	8 relay outputs, 5A, SPST-NO		GT1-ROS16
I/O Unit Connec	ting Cable		1 m		GCN1-100

# CompoBus/S Slave Modules

### **■** CompoBus/S Slave Modules

Name	Specifications	Standards	Part number
I/O Link Modules	For CPM2C; 8 input points, 8 output points	CE	CPM2C-SRT21
	For CPM1A/CPM2A; 8 input points, 8 output points	U, C, CE	CPM1A-SRT21
Remote I/O Terminals with Transistors	4 input points, NPN (+ common)	U, C, CE	SRT2-ID04
	4 input points, PNP (- common)		SRT2-ID04-1
	4 output points, NPN (- common)		SRT2-OD04
	4 output points, PNP (+ common)		SRT2-OD04-1
	8 input points, NPN (+ common)		SRT2-ID08
	8 input points, PNP (- common)		SRT2-ID08-1
	8 output points, NPN (- common)		SRT2-OD08
	8 output points, PNP (+ common)		SRT2-OD08-1
	16 input points, NPN (+ common)		SRT2-ID16
	16 input points, PNP (- common)		SRT2-ID16-1
	16 output points, NPN (- common)		SRT2-OD16
	16 output points, PNP (+ common)		SRT2-OD16-1
Remote I/O Terminals with Transistors	16 input points, NPN (+ common)		SRT2-ID16T
and 3-tier Terminal Block	16 input points, PNP (- common)		SRT2-ID16T-1
	16 I/O points, NPN (inputs: + common, outputs: - common)		SRT2-MD16T
	16 I/O points, PNP (inputs: - common, outputs: + common)		SRT2-MD16T-1
	16 output points, NPN (- common)		SRT2-OD16T
	16 output points, PNP (+ common)		SRT2-OD16T-1
Remote Input Terminals with Transistors and Connectors (4/8	4 input points, NPN (+ common)	CE	SRT2-ID04MX
points)	8 input points, PNP (+ common)		SRT2-ID08MX
Remote Output Terminals with Relays	8 relay output points	U, C, CE	SRT2-ROC08
	16 relay output points		SRT2-ROC16
	8 power MOSFET relay output points		SRT2-ROF08
	16 power MOSFET relay output points		SRT2-ROF16

# CompoBus/S Modules

### CompoBus/S Slave Modules (Continued)

Name	Specifications	Standards	Part number
Remote I/O Terminals with Transistors	32 input points, NPN (+ common)	CE	SRT2-ID32ML
and Connectors	32 input points, PNP (- common)		SRT2-ID32ML-1
	32 output points, NPN (- common)		SRT2-OD32ML
	32 output points, PNP (+ common)		SRT2-OD32ML-1
	32 I/O points, NPN (inputs: + common, outputs: - common)		SRT2-MD32ML
	32 I/O points, PNP (inputs: - common, outputs: + common)		SRT2-MD32ML-1
	8 input points, NPN (+ common)	U, C, CE	SRT2-VID08S
	8 input points, PNP (- common)		SRT2-VID08S-1
	8 output points, NPN (- common)		SRT2-VOD08S
	8 output points, PNP (+ common)		SRT2-VOD08S-1
	16 input points, NPN (+ common)		SRT2-VID16ML
	16 input points, PNP (- common)		SRT2-VID16ML-1
	16 output points, NPN (- common)		SRT2-VOD16ML
	16 output points, PNP (+ common)		SRT2-VOD16ML-1
	Mounting Bracket A		SRT2-ATT01
	Mounting Bracket B		SRT2-ATT02
Waterproof Terminals (with Transistors)	4 input points, NPN (+ common)	CE	SRT2-ID04CL
	4 input points, PNP (- common)		SRT2-ID04CL-1
	4 output points, NPN (- common)		SRT2-OD04CL
	4 output points, PNP (+ common)		SRT2-OD04CL-1
	8 input points, NPN (+ common)		SRT2-ID08CL
	8 input points, PNP (- common)		SRT2-ID08CL-1
	8 output points, NPN (- common)		SRT2-OD08CL
	8 output points, PNP (+ common)		SRT2-OD08CL-1
CompoBus/S Fiber Amplifier Sensor Communication Unit	Connects to up to 14 Fiber Amplifier Modules		E3X-SRT21
Sensor Terminals	8 Sensor inputs (NPN)		SRT2-ID08S
	4 remote-teaching Sensor inputs, 4 outputs (NPN)		SRT2-ND08S
	8 Sensor outputs (NPN)		SRT2-OD08S
Analog Input Terminal	1 to 4 inputs (set via DIP switch)	U, C. CE	SRT2-AD04
Analog Output Terminal	1 or 2 outputs (set via DIP switch)		SRT2-DA02
Remote I/O Modules	16 input points, NPN (+ common)		SRT2-ID16P
	16 output points, NPN (- common)		SRT2-OD16P
Positioner Drivers	200-VAC input, 6 A	U, CE, CU	FND-X06H-SRT
(Cannot be used in Long-distance	200-VAC input, 12 A		FND-X12H-SRT
Communications Mode.)	200-VAC input, 25 A		FND-X25H-SRT
	200-VAC input, 50 A		FND-X50H-SRT
	100-VAC input, 6 A		FND-X06L-SRT
	100-VAC input, 12 A		FND-X12L-SRT

# **Optional Products**

### **■** Optional Products

Name	Specifications		Standards	Part number
I/O Unit Cover	Cover for 10-pin terminal block			C200H-COV11
Terminal Block Covers	Short protection for 10-pin terminal block (package	of 10 covers); 8 pts		C200H-COV02
	Short protection for 19-pin terminal block (package	of 10 covers); 12 pts		C200H-COV03
C200H Unit Connector Cover	Protective cover for unused I/O Connecting Cable connectors			C500-COV01
CS1 Special I/O Unit Connector Cover	Protective cover for unused I/O Connecting Cable connectors			CV500-COV01
C200H Expansion I/O	Electrically insulate C200H Expansion I/O Back- planes from the control panel to increase noise resistance.	For 3-slot Backplane	N, L, CE	C200HW-ATT32
Backplane Insulation Plates		For 5-slot Backplane		C200HW-ATT52
e e		For 8-slot Backplane		C200HW-ATT82
		For 10-slot Back- plane		C200HW-ATTA2
Relay	24 VDC, for C200H-OC221/OC222/OC223/OC224/OC225			G6B-1174P-FD-US
Programming Console Mounting Bracket	Used to attach C200H-PRO27-E Hand-held Programming Console to a panel.			C200H-ATT01
Space Unit	Used for empty I/O slot.			C200H-SP001
Terminating Resistor (See note.)	Mounts to end of CS1 Long-distance Expansion Rack		U, C	CV500-TER01

Note: Two Terminating Resistors are included with the CS1W-IC102 I/O Control Unit.

### **Mounting Rails and Accessories**

Name	Specifications	Standards	Part number
DIN Track Mounting Bracket	1 set (2 included)		C200H-DIN01
DIN Tracks	Length: 50 cm; height: 7.3 cm		PFP-50N
DIN Hacks	Length: 1 m; height: 7.3 cm		PFP-100N
	Length: 50 cm; height: 16 mm		PFP-100N2
End Plate			PFP-M
Spacer			PFP-S

### **Certain Terms and Conditions of Sale**

- Offer: Acceptance. These terms and conditions (these "Terms") are deemed part of all catalogs, manuals or other documents, whether electronic or in writing, relating to the sale of goods or services (collectively, the "Goods") by Omron Electronics LLC and its subsidiary companies ("Seller"). Seller hereby objects to any terms or conditions proposed in Buyer's purchase order or other documents which are inconsistent with, or in addition to, these Terms. Please contact your Omron representative to confirm any additional terms for sales from your Omron company
- All prices stated are current, subject to change without notice by
- Seller. Buyer agrees to pay the price in effect at time of shipment.

  Discounts. Cash discounts, if any, will apply only on the net amount of invoices sent to Buyer after deducting transportation charges, taxes and duties, and will be allowed only if (i) the invoice is paid according to Seller's payment terms and (ii) Buyer has no past due amounts owing to Seller.
- Orders. Seller will accept no order less than \$200 net billing.

  Governmental Approvals. Buyer shall be responsible for, and shall bear all costs involved in, obtaining any government approvals required for the importation or sale of the Goods.

  Taxes. All taxes, duties and other governmental charges (other than general
- real property and income taxes), including any interest or penalties thereon, imposed directly or indirectly on Seller or required to be collected directly or indirectly by Seller for the manufacture, production, sale, delivery, importation, consumption or use of the Goods sold hereunder (including customs duties and sales, excise, use, turnover and license taxes) shall be charged to and
- and sales, excise, use, further and ficerise taxes, shall be charged to and remitted by Buyer to Seller.

  Financial. If the financial position of Buyer at any time becomes unsatisfactory to Seller, Seller reserves the right to stop shipments or require satisfactory security or payment in advance. If Buyer fails to make payment or otherwise comply with these Terms or any related agreement, Seller may (without liability and in addition to other remedies) cancel any unshipped portion of Goods sold hereunder and stop any Goods in transit until Buyer pays all amounts, including amounts payable hereunder, whether or not then due, which are owing to it
- by Buyer. Buyer shall in any event remain liable for all unpaid accounts.

  <u>Cancellation; Etc.</u> Orders are not subject to rescheduling or cancellation unless Buyer indemnifies Seller fully against all costs or expenses arising in connection therewith.
- Force Majeure. Seller shall not be liable for any delay or failure in delivery resulting from causes beyond its control, including earthquakes, fires, floods, strikes or other labor disputes, shortage of labor or materials, accidents to machinery, acts of sabotage, riots, delay in or lack of transportation or the

- requirements of any government authority.

  10. Shipping: Delivery. Unless otherwise expressly agreed in writing by Seller:
  a. Shipments shall be by a carrier selected by Seller;
  b. Such carrier shall act as the agent of Buyer and delivery to such carrier shall constitute delivery to Buyer;
  - shall constitute delivery to Buyer;

    shall see and shipments of Goods shall be FOB shipping point (unless otherwise stated in writing by Seller), at which point title to and all risk of loss of the Goods shall pass from Seller to Buyer, provided that Seller shall retain a security interest in the Goods until the full purchase price is paid by Buyer;

    d. Delivery and shipping dates are estimates only.

    e. Seller will package Goods as it deems proper for protection against normal handling and extra charges apply to special conditions.
- handling and extra charges apply to special conditions.

  <u>Claims.</u> Any claim by Buyer against Seller for shortage or damage to the Goods occurring before delivery to the carrier must be presented in writing to Seller within 30 days of receipt of shipment and include the original transportation bill signed by the carrier noting that the carrier received the Goods from Seller in the condition claimed.

- Warranties. (a) Exclusive Warranty. Seller's exclusive warranty is that the Warranties. (a) Exclusive Warranty. Seller's exclusive warranty is that the Goods will be free from defects in materials and workmanship for a period of twelve months from the date of sale by Seller (or such other period expressed in writing by Seller). Seller disclaims all other warranties, express or implied. (b) Limitations. SELLER MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABIL-ITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE GOODS. BUYER ACKNOWLEDGES THAT IT ALONE HAS DETERMINED THAT THE GOODS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE. Seller further disclaims all warranties and responsibility of any type for claims or expenses based on infringement by the Goods or otherwise of any intellectual property right. (c) Bluer Remerly. Seller's sole obligawise of any intellectual property right. (c) <u>Buyer Remedy</u>. Seller's sole obligation hereunder shall be to replace (in the form originally shipped with Buyer responsible for labor charges for removal or replacement thereof) the noncomplying Good or, at Seller's election, to repay or credit Buyer an amount equal to the purchase price of the Good; provided that in no event shall Seller be responsible for warranty, repair, indemnity or any other claims or expenses regarding the Goods unless Seller's analysis confirms that the Goods were properly handled, stored, installed and maintained and not subject to contaminate the confirms that the Goods were properly handled, stored, installed and maintained and not subject to contaminate the confirms that the Goods were properly handled, stored, installed and maintained and not subject to contaminate the confirms that the Goods were properly handled, stored, installed and maintained and not subject to contaminate the confirms that the confirms t nation, abuse, misuse or inappropriate modification. Return of any goods by Buyer must be approved in writing by Seller before shipment. Seller shall not be liable for the suitability or unsuitability or the results from the use of Goods 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.

  Damage Limits: Etc. SELLER SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE GOODS, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE OR STRICT LIABILITY. Further, in no event shall liability of Seller exceed the individual price of the Good on which liability is asserted.
- Indemnities. Buyer shall indemnify and hold harmless Seller, its affiliates and its employees from and against all liabilities, losses, claims, costs and expenses (including attorney's fees and expenses) related to any claim, investigation, litigation or proceeding (whether or not Seller is a party) which arises or is alleged to arise from Buyer's acts or omissions under these Terms or in any way with respect to the Goods. Without limiting the foregoing, Buyer (at its own expense) shall indemnify and hold harmless Seller and defend or settle any action brought against Seller to the extent that it is based on a claim that any Good made to Buyer specifications infringed intellectual property rights of another party.
- Property: Confidentiality. The intellectual property embodied in the Goods is the exclusive property of Seller and its affiliates and Buyer shall not attempt to duplicate it in any way without the written permission of Seller. Notwithstanding any charges to Buyer for engineering or tooling, all engineering and tooling shall remain the exclusive property of Seller. All information and materials supplied by Seller to Buyer relating to the Goods are confidential and propri-
- supplied by Seller to Buyer relating to the Goods are confidential and proprietary, and Buyer shall limit distribution thereof to its trusted employees and strictly prevent disclosure to any third party.

  Miscellaneous. (a) Waiver. No failure or delay by Seller in exercising any right and no course of dealing between Buyer and Seller shall operate as a waiver of rights by Seller. (b) Assignment. Buyer may not assign its rights hereunder without Seller's written consent. (c) Amendment. These Terms constitute the entire agreement between Buyer and Seller relating to the Goods, and no provision may be changed or waived unless in writing signed by the parties. (d) Severability. If any provision hereof is rendered ineffective or invalid, such (d) <u>Severability</u>. If any provision hereof is rendered ineffective or invalid, such provision shall not invalidate any other provision. (e) <u>Setoff.</u> Buyer shall have no right to set off any amounts against the amount owing in respect of this invoice. (f) As used herein, "including" means "including without limitation".

## Certain Precautions on Specifications and Use

- Suitability of Use. Seller shall not be responsible for conformity with any standards, codes or regulations which apply to the combination of the Good in the Buyer's application or use of the Good. At Buyer's request, Seller will provide applicable third party certification documents identifying ratings and limitations of use which apply to the Good. This information by itself is not sufficient for a complete determination of the suitability of the Good in combination with the end product, machine, system, or other application or use. The following are some examples of applications for which particular attention must be given. This is not intended to be an exhaustive list of all possible uses of this Good, nor is it intended to imply that the uses listed may be suitable for this Good. nor is it intended to imply that the uses listed may be suitable for this Good:
  - Outdoor use, uses involving potential chemical contamination or electrical interference, or conditions or uses not described in this document.
  - Energy control systems, combustion systems, railroad systems, aviation systems, medical equipment, amusement machines, vehicles, safety equipment, and installations subject to separate industry or government regulations.
  - (iii) Systems, machines and equipment that could present a risk to life or property. Please know and observe all prohibitions of use applicable to this Good.
  - IN GOOD.

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

- Programmable Products. Seller shall not be responsible for the user's programming of a programmable Good, or any consequence thereof.

  Performance Data. Performance data given in this catalog is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of Seller's test conditions, and the user must correlate it to actual application requirements. Actual performance is subject to the Seller'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 Good 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 Seller's representative at any time to confirm actual specifications of purchased Good.
- Errors and Omissions. The information in this catalog has been carefully checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical or proofreading errors, or omissions.



Complete "Terms and Conditions of Sale" for product purchase and use are on Omron's website at www.omron.com/oei – under the "About Us" tab, in the Legal Matters section.

#### ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

2/04

 $To \ convert \ millimeters \ into \ inches, \ multiply \ by \ 0.03937. \ To \ convert \ grams \ into \ ounces, \ multiply \ by \ 0.03527.$ 

# OMRON:

**OMRON ELECTRONICS LLC** 

One Commerce Drive Schaumburg, IL 60173

847-843-7900

For US technical support or other inquiries:

800-556-6766

Cat. No. R301-E3-01

OMRON CANADA, INC. 885 Milner Avenue

Toronto, Ontario M1B 5V8

416-286-6465

**OMRON ON-LINE** 

Global - http://www.omron.com USA - http://www.omron.com/oei

Canada - http://www.omron.ca

Specifications subject to change without notice

Printed in USA