Basic I/O Units

CS1 Basic I/O Units

■Input Units

Unit type	Product name	Specifications	Mountable Racks							Words required	Current consumption (A)		Model
			CPU Rack		C200HX/ HG/HE Expansion I/O Rack	CS1 Expansion Rack		CS1 Long-distance Expansion Rack	SYSMAC BUS Slave Rack	(I/O bits: CIO 0000 to CIO 0319)	5 V system	26 V system	
			CS1W-BC			CS1W-BI							
			□□3	□□2		□□3	□□2						
CS1 Basic I/O Units	DC Input Unit 	24 VDC, 7 mA, 16 inputs	Yes	Yes	No	Yes	Yes	Yes	No	1 word	0.10	---	CS1W-ID211
		24 VDC, 6 mA, 32 inputs	Yes	Yes	No	Yes	Yes	Yes	No	2 words	0.15	---	CS1W-ID231
		24 VDC, 7 mA, 64 inputs	Yes	Yes	No	Yes	Yes	Yes	No	4 words	0.15	---	CS1W-ID261
		24 VDC, approx. 5 mA, 96 inputs	Yes	Yes	No	Yes	Yes	Yes	No	6 words	0.20	---	CS1W-ID291
	AC Input Unit 	100 to 120 VAC, 16 inputs 100 to 120 VDC, 16 inputs	Yes	Yes	No	Yes	Yes	Yes	No	1 word	0.11	---	CS1W-IA111
		200 to 240 VAC, 16 inputs	Yes	Yes	No	Yes	Yes	Yes	No	1 word	0.11	---	CS1W-IA211

■Output Units

Unit type	Product name	Specifications		Mountable Racks							Words required	Current consumption (A)		Model
				CPU Rack		C200HX/ HG/HE Expansion I/O Rack	CS1 Expansion Rack		CS1 Long-distance Expansion Rack	SYSMAC BUS Slave Rack		5 V system	26 V system	
				CS1W-BC			CS1W-BI							
				□□3	□□2		□□3	□□2						
CS1 Basic I/O Units	Relay Output Units 	250 VAC or 120 VDC, 2 A max. Independent contacts, 8 outputs		Yes	Yes	No	Yes	Yes	Yes	No	1 word	0.10	0.006 per simultaneously ON outputs	CS1W-OC201
		250 VAC or 120 VDC, 2 A max. 16 outputs		Yes	Yes	No	Yes	Yes	Yes	No	1 word	0.13		CS1W-OC211
	Transistor Output Units 	12 to 24 VDC, 0.5 A 16 outputs	Sinking	Yes	Yes	No	Yes	Yes	Yes	No	1 word	0.17	---	CS1W-OD211
		24 VDC, 0.5 A 16 outputs	Sourcing	Yes	Yes	No	Yes	Yes	Yes	No	1 word	0.17	---	CS1W-OD212
		12 to 24 VDC, 0.5 A 32 outputs	Sinking	Yes	Yes	No	Yes	Yes	Yes	No	2 words	0.27	---	CS1W-OD231
		24 VDC, 0.5 A 32 outputs	Sourcing	Yes	Yes	No	Yes	Yes	Yes	No	2 words	0.27	---	CS1W-OD232
		12 to 24 VDC, 0.3 A 64 outputs	Sinking	Yes	Yes	No	Yes	Yes	Yes	No	4 words	0.39	---	CS1W-OD261
		24 VDC, 0.3 A 64 outputs	Sourcing	Yes	Yes	No	Yes	Yes	Yes	No	4 words	0.39	---	CS1W-OD262
		12 to 24 VDC, 0.1 A 96 outputs	Sinking	Yes	Yes	No	Yes	Yes	Yes	No	6 words	0.48	---	CS1W-OD291
		12 to 24 VDC, 0.1 A 96 outputs	Sourcing	Yes	Yes	No	Yes	Yes	Yes	No	6 words	0.48	---	CS1W-OD292
	Triac Output Units 	250 VAC, 2 A max. 8 outputs		Yes	Yes	No	Yes	Yes	Yes	No	1 word	0.23 max. (0.07 + 0.02 × number of ON points)	---	CS1W-OA201 ✻
		250 VAC, 0.5 A max. 16 outputs		Yes	Yes	No	Yes	Yes	Yes	No	1 word	0.406 max. (0.07 + 0.021 × number of ON points)	---	CS1W-OA211

✻ Product no longer available to order.

Replacing C200H I/O Units

This section shows the corresponding CS1 I/O models and notes for replacing C200H I/O Units (no longer available to order).

16-point DC Input Units

Item	C200H I/O Unit	Corresponding CS1 I/O Unit
Model number	C200H-ID212 ➡	CS1W-ID211
Description	16-point DC Input Units with terminal blocks	
Notes	The terminal arrangement must be changed.	
	The impedance increases (from 3kΩ to 3.3kΩ). Check that correct operation is possible in cases where increased impedance may influence operation.	
	The internal 5-V current consumption increases (from 10mA to 100mA). Check that the increased current is within the range of the power supply.	

32-point DC Input Units

Item	C200H I/O Unit	Corresponding CS1 I/O Unit
Model number	C200H-ID218 ➡	CS1W-ID231
Description	32-point DC Input Units with connectors. The connectors, the pin arrangement, and the input specifications are the same.	
Notes	There are 2 commons instead of 1. Connect where necessary.	
	The internal 5-V current consumption increases (from 100mA to 150mA). Check that the increased current is within the range of the power supply.	

32-point DC Input Units (cntd.)

Item	C200H I/O Unit	Corresponding CS1 I/O Unit
Model number	C200H-ID216 ➡	CS1W-ID231
Description	32-point DC Input Units with connectors. The connectors and the pin arrangement are the same. The input current increases, allowing use with a wider range of devices.	
Notes	There are 2 commons instead of 1. Connect where necessary.	
	The input specifications change (e.g., the impedance decreases and the input current increases from 4.1mA to 6mA.) Check that correct operation is possible in cases where changes in input specifications may influence operation.	
	The internal 5-V current consumption increases (from 100mA to 150mA). Check that the increased current is within the range of the power supply.	

64-point DC Input Units

Item	C200H I/O Unit	Corresponding CS1 I/O Unit
Model number	C200H-ID219 ➡	CS1W-ID261
Description	64-point DC Input Units with connectors. The connectors, the pin arrangement, and the input specifications are the same.	
Notes	There are 4 commons instead of 2. Connect where necessary.	
	The internal 5-V current consumption increases (from 120mA to 150mA). Check that the increased current is within the range of the power supply.	

64-point DC Input Units (cntd.)

Item	C200H I/O Unit	Corresponding CS1 I/O Unit
Model number	C200H-ID217 ➡	CS1W-ID261
Description	64-point DC Input Units with connectors. The connectors and the pin arrangement are the same. The input current increases, allowing use with a wider range of devices.	
Notes	There are 4 commons instead of 2. Connect where necessary.	
	The input specifications change (e.g., the impedance decreases and the input current increases from 4.1mA to 6mA.) Check that correct operation is possible in cases where changes in input specifications may influence operation.	
	The internal 5-V current consumption increases (from 100mA to 150mA). Check that the increased current is within the range of the power supply.	

16-point Sinking Transistor Output Units

Item	C200H I/O Unit	Corresponding CS1 I/O Unit
Model number	C200H-OD212 ➡	CS1W-OD211
Description	16-point Transistor Output (sinking) Units with terminal blocks. The output current capacity increases (from 0.3A per point and 4.8A per Unit to 0.5A per point and 8A per Unit). The rated voltage range also increases (from 24V to any voltage in the range 12 to 24V.)	
Notes	The terminal arrangement must be changed.	
	The output specifications change. Check that correct operation is possible in cases where changes in output specifications may influence operation. (Residual voltage increases from 0.8V to 1.5V, ON response time increases from 0.1ms to 0.5ms, OFF response time increases from 0.3ms to 1ms.)	