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.

16-point Sourcing Transistor Output Units

Item	C200H I/O Unit	Corresponding CS1 I/O Unit
Model number	C200H-OD21A	CS1W-OD212
Description	16-point Transistor Output (sourcing) Units with terminal blocks.	
Notes	The terminal arrangement must be changed.	
	The output capacity changes (from 1A per point and 4A per Unit to 0.5A per point and 5A per Unit). Check that correct operation is possible in cases where changes in output capacity may influence operation.	
	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.)	
	The internal 5-V current consumption increases (from 160mA to 170mA). The external 24-V power supply current also increases (from 35mA to 40mA). Check that the increased current is within the range of the power supply.	
	There are no alarm output contacts. Use the alarm bits in the Auxiliary Area.	

32-point Sinking Transistor Output Units

Item	C200H I/O Unit	Corresponding CS1 I/O Unit
Model number	C200H-OD218	CS1W-OD231
Description	32-point Transistor Output (sinking) Units with connectors. The connectors and the pin arrangement are the same. The output current capacity increases (from 100mA to 0.5A per point, 2.5A per common, and 5A per Unit). The load voltage range changes from 4.5 to 26.4V to 10.2 to 26.4V.	
Notes	There are 2 commons instead of 1. Connect where necessary.	
	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 0.4ms to 1ms.)	
	Replacement is not possible for applications with an output load range of 4.5 to 10.2V.	
	The internal 5-V current consumption increases (from 180mA to 270mA). Check that the increased current is within the range of the power supply.	

32-point Sourcing Transistor Output Units

Item	C200H I/O Unit	Corresponding CS1 I/O Unit
Model number	C200H-OD21B	CS1W-OD232
Description	32-point Transistor Output (sourcing) Units with connectors. The connectors and the pin arrangement are the same.	
Notes	There are 2 commons instead of 1. Connect where necessary.	
	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.)	
	The internal 5-V current consumption increases (from 180mA to 270mA). Check that the increased current is within the range of the power supply.	

64-point Sinking Transistor Output Units

Item	C200H I/O Unit	Corresponding CS1 I/O Unit
Model number	C200H-OD219	CS1W-OD261
Description	64-point Transistor Output (sinking) Units with connectors. The connectors and the pin arrangement are the same. The output current capacity increases (from 100mA to 0.3A per point, 1.6A per common, and 6.4A per Unit). The load voltage range changes from 4.5 to 26.4V to 10.2 to 26.4V.	
Notes	There are 4 commons instead of 2. Connect where necessary.	
	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 0.4ms to 1ms.)	
	Replacement is not possible for applications with an output load range of 4.5 to 10.2V.	
	The internal 5-V current consumption increases (from 270mA to 390mA). Check that the increased current is within the range of the power supply.	

16-point 100-VAC Input Units

Item	C200H I/O Unit	Corresponding CS1 I/O Unit
Model number	C200H-IA122/122V	CS1W-IA111
Description	16-point 100-VAC Input Units with terminal blocks. 100-VDC input also possible.	
Notes	The terminal arrangement must be changed.	
	The input specifications change. Check that correct operation is possible in cases where changes in input specifications may influence operation. (ON voltage increases from 60VAC min. to 65VAC min. and the input impedance (50Hz) increases from 9.7kΩ to 10kΩ.)	
	The internal 5-V current consumption increases (from 10mA to 110mA). Check that the increased current is within the range of the power supply.	