PRODUCT NEWS

Product Discontinuation Notices

Programmable Controllers

OMRON

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Discontinuation Notice of Position Control unit C200H-NC111/112, High-speed Counter unit C200H-CT001-V1/CT002, Transistor Output Unit C200H-OD21A and CPU backplane adopter for C200H/HS C200HW-AB001.

Product Discontinuation	Recommended Replacement
Position Control unit **Model C200H-NC111/112**	Position Control unit **Model CJ1W-NC113/CS1W-NC113**
High-speed Counter unit **Model C200H-CT001-V1/002**	High-speed Counter unit **Model CJ1W-CT021/CS1W-CT021**
Transistor Output Unit **Model C200H-OD21A**	Transistor Output Unit **Model CJ1W-OD212/CS1W-OD212**
CPU backplane adopter for C200H/HS **Model C200HW-AB001**	**No replacement model for backplane adopter. Please replace backplane. Model C200HW-BC[][]1(-V1)**

[Discontinuation date]

The end of March, 2015

[Caution on recommended replacement]

If the customer is using C200H-NC111/112, C200H-CT001-V1/002 and C200H-OD21A installed on CS1 PLC backplane, replacing by CS1W-NC113, CS1W-CT021 and CS1W-OD212 does not require the complete system to be changed.

If the customer is using those discontinued units installed on C200H PLC backplane, it's necessary to replace by CJ or CS PLC system.
If it's difficult for the customer to replace PLC soon, the customer could consider replacing by C200HW-NC113, C200H-CT021 and C200H-OD[][][].
There are differences of specifications.
Please refer to the operation manual.

C200HW-AB001 is an adopter which makes it possible to install C200HX/HG/HE CPU units and power supply unit on C200H/HS backplane.
It's necessary to replace by backplane for C200HX/HG/HE.

[Difference from discontinued product]

Recommended replacement Model	Body Color	Dimen -sions	Wire connection	Mounting Dimensions	Charact -eristics	Operation ratings	Operation methods
CJ1W-NC113	--	--	--	--	*	*	--
CS1W-NC113	*	*	--	--	*	*	--
CJ1W-CT021	--	--	--	--	*	*	--
CS1W-CT021	*	*	--	--	*	*	--
CS1W-OD212	--	--	--	--	*	*	--
CJ1W-OD212	*	*	--	--	*	*	--
C200HW-BC[][]1(-V1)	--	*	*	*	*	*	*

** : Compatible
* : The change is a little/Almost compatible
-- : Not compatible
- : No corresponding specification

[Product Discontinuation and recommended replacement]

Product discontinuation	Recommended replacement
C200H-NC111 C200H-NC112	CJ1W-NC113 CS1W-NC113
C200H-CT001-V1 C200H-C002	CJ1W-CT021 CS1W-CT021
C200H-OD21A	CJ1W-OD212 CS1W-OD212
C200HW-AB001	C200HW-BC031 C200HW-BC051 C200HW-BC081-V1 C200HW-BC101-V1

< Position Control unit: C200H-NC111/112 >
[Specifications]

		Discontinuation Model		Recommendable replacement Model	Reference
		C200H-NC111	**C200H-NC112**	**CJ1W-NC113 CS1W-NC113**	**C200HW-NC113 (*)**
Num. of axes		1	1	1	1
Control system		Automatic trapezoidal acceleration/deceleration system	Automatic trapezoidal acceleration/deceleration system	Open-loop control by pulse train output	Open-loop control by pulse train output
Positions	**Range**	-8,388,607 to +8,388,606 pluses	-8,388,607 to +8,388,606 pluses	-1,073,741,823 to + 1,073,741,823 pluses	-9,999,999 to 9,999,999 pluses
	Num. of positions	20	20	100/1 axis	100/1 axis
Speeds	**Range**	1 to 99,990 pps	1 to 250,000 pps	1 pps to 500 kpps	1 pps to 500 kpps
	Num. of speeds	15	15	100/1 axis	100/1 axis
Acceleration/ deceleration		1 to 999 pps/ms	2 to 2,000 pps/ms	0 to 250 s (until maximum speed is reached)	0 to 250 s (until maximum speed is reached)
Origin search	**Origin proximity**	Either absent, N.O. input, or N.C. input (selectable)	Either absent, N.O. input, or N.C. input (selectable)	selectable (absent, N.O. or N.C. contact)	selectable (absent, N.O. or N.C. contact)
	Origin signal	Either N.O. input or N.C. input (selectable)	Origin signal: either N.O. input or N.C. input (selectable)	selectable (N.O. or N.C. contact)	selectable (N.O. or N.C. contact)
	Origin compensation	0 to 9,999 pluses	0 to 9,999 pluses	-1,073,741,823 to +1,073,741,823 pluses	- 9,999,999 to +9,999,999 pluses
	Origin search speeds	High speed and proximity speed available	High speed and proximity speed available	High-speed or proximity-speed can be set	High-speed or proximity-speed can be set
Backlash compensation		0 to 9,999 pluses	0 to 9,999 pluses	0 to 9,999 pluses Compensation speed can also be set	0 to 9,999 pluses Compensation speed can also be set
Manual operation		High-speed jog, low-speed jog, and inching	High-speed jog, low-speed jog, and inching	Jogging can be executed at a specified speed.	Jogging can be executed at a specified speed.
Internal current		200 mA max. at 5 VDC (consumption from Rack)	200 mA max. at 5 VDC (consumption from Rack)	250 mA max. at 5 VDC	300 mA max. at 5 VDC

(*) C200HW-NC113 is not discontinuation model.

[Wire connections]

Product discontinuation Model

C200H-NC111/112

External connector: FCN-361J040
(Fujitsu solder-type; included as an accessory.)

Row B	Pin no.	Row A
Emergency stop input (0 V)	20	Emergency stop input (12 to 24 VDC)
Emergency interrupt input (0 V)	19	External interrupt input (12 to 24 VDC)
	18	
	17	
	16	
	15	
	14	
CW limit input (0 V)	13	CW limit input (12 to 24 VDC)
CCW limit input (0 V)	12	CCW limit input (12 to 24 VDC)
Origin input (0 V)	11	Origin input (12 to 24 VDC)
Origin proximity input (0 V)	10	Origin proximity input (12 to 24 VDC)
	9	
	8	
	7	
	6	
Output power (0 V)	5	Output power (0 V)
CW pulse or nondirectional pulse output	4	CW pulse or nondirectional pulse output (1.6 kΩ)
CW pulse or direction signal output	3	CCW pulse or direction signal output (1.6 kΩ)
5-VDC power supply input	2	
	1	24-VDC power supply input

Row B	Pin no.	Row A
Emergency stop input (0V)	20	Emergency stop input (12 to 24 VDC)
External interrupt input (0V)	19	External interrupt input (12 to 24 VDC)
	18	
	17	
	16	
	15	
	14	
CW limit input (0V)	13	CW limit input (12 to 24 VDC)
CCW limit input (0V)	12	CCW limit input (12 to 24 VDC)
Origin input (0V)	11	Origin input (12 to 24 VDC)
Origin proximity input (0V)	10	Origin proximity input (12 to 24 VDC)
Driver completed input (0V)	9	Driver completed input (12 to 24 VDC)
Origin line driver input (–Z)	8	Origin line driver input (+Z)
Origin adjustment output (0V)	7	Origin adjustment output (open collector)
Decrement counter reset output (0V)	6	Decrement counter reset output (open collector)
Output power (0V)	5	Output power (0V)
CW pulse or nondirectional pulse output	4	CW pulse or nondirectional pulse output (1.6kΩ)
CW pulse or direction signal output	3	CCW pulse or direction signal output (1.6 kΩ)
5-VDC output power supply	2	
	1	24-VDC output power supply

Recommendable replacement Model

CJ1W-NC113, CS1W-NC113

Connector pin arrangement for X and Z axes		
Pin No.	I/O	Designation
A1	IN	Power supply, 24 V DC (for output signals)
A2	IN	GND, 24 V DC (for output signals)
A3	---	Not used
A4	---	Not used
A5	OUT	CW pulse output
A6	OUT	CW pulse output with 1.6-kΩ resistance
A7	OUT	CCW pulse/direction output
A8	OUT	CCW pulse/direction output with 1.6-kΩ resistance
A9	OUT	Error counter reset output/origin-adjustment command output
A10	OUT	Error counter reset output with 1.6-kΩ resistance Origin-adjustment command output with 1.6-kΩ resistance
A11	IN	Positioning completed input signal
A12	IN	Origin common
A13	IN	Origin input signal (24 V)
A14	IN	Origin input signal (5 V)
A15	IN	Interrupt input signal
A16	IN	Emergency stop input signal
A17	IN	Origin proximity input signal
A18	IN	CW limit input signal
A19	IN	CCW limit input signal
A20	IN	Input common

C200HW-NC113

Connector pin arrangement for X and Z axes		
Pin No.	I/O	Designation
A1	IN	Output power supply, 24 VDC
A2	IN	Output GND, 24 VDC
A3	---	Not used
A4	---	Not used
A5	OUT	CW pulse output
A6	OUT	CW pulse/pulse output with 1.6 kΩ resistance
A7	OUT	CCW pulse/direction output
A8	OUT	CCW pulse/direction output with 1.6 kΩ resistance
A9	---	Not used
A10	OUT	Error counter reset output Origin-adjustment command output
A11	OUT	Error counter reset output with 1.6 kΩ resistance Origin-adjustment command output with 1.6KΩ resistance
A12	IN	Positioning completed input signal
A13	---	Not used
A14	IN	Origin common
A15	IN	Origin input signal (24 V)
A16	IN	Origin input signal (5 V)
A17	---	Not used
A18	---	Not used
A19	IN	Interrupt input signal
A20	IN	Emergency stop input signal
A21	IN	Origin proximity input signal
A22	IN	CW limit input signal
A23	IN	CCW limit input signal
A24	IN	Input common

< High-speed controller unit: C200H-CT001-V1/002 >
[Specifications]

		Discontinuation Model		Recommendable replacement Model	Replacement Model
		C200H-CT001-V1	C200H-CT002	CJ1W-CT021 CS1W-CT021	C200H-CT021 (*)
Num. of axes		1	1	2	2
Operating mode		6 modes	6 modes	3 modes	7 modes
Count input	**Input signals**	Input A, B	Input A, B	Counter 1: input A, B, Z Counter 2: input A, B, Z	Counter 1: input A, B Counter 2: input A, B
	Signal level	5, 12, or 24 VDC (Selected when wiring)	Same as RS-422 line driver (Am26LS31-compatible)	5, 12, or 24 VDC (Selected when wiring) Same as RS-422 line driver	12, or 24 VDC (Selected when wiring) Same as RS-422 line driver
	Input mode	Offset phases, Separate up and down inputs, Pulse and direction inputs	Offset phases, Separate up and down inputs, Pulse and direction inputs	Offset phases, Separate up and down inputs, Pulse and direction inputs	Offset phases, Separate up and down inputs, Pulse and direction inputs
	Counting speed	50 kcps	75 kcps	500 kHz	50 kcps 75 kcps (line driver)
	Others	Input multiplier (x2 or x4) available for offset phase inputs.	Input multiplier (x2 or x4) available for offset phase inputs.	Phase Differential (multiplication x1), (multiplication x2) *1 and (multiplication x4) *1	Phase Differential (multiplication x1), (multiplication x2) *1 and (multiplication x4) *1
External input	**Input signal**	Input Z	Input Z	Counter 1: input Z Counter 2: input Z	Counter 1: input Z Counter 2: input Z
	Signal level	Control input IN1, IN2	Control input IN1, IN2	Counter 1: input A, B, Z Counter 2: input A, B, Z	Counter 1:IN1, 2 Counter 2: IN1, 2
		5, 12, or 24 VDC (Selected when wiring).	Same as RS-422 line driver (Am26LS31-compatible) .	5, 12, or 24 VDC (Selected when wiring) Same as RS-422 line driver	12, or 24 VDC (Selected when wiring) Same as RS-422 line driver
	Input signal	Control input IN1, IN2	Control input IN1, IN2	External control input CS1W-CT021: I0 to I3 (4 points) CJ1W-CT021: I0 to I1 (2 points)	Control inputs IN1, 2
	Signal level	5, 12, or 24 VDC (Selected when wiring).	5, 12, or 24 VDC (Selected when wiring).	24 VDC	12 VDC, 24 VDC (Selected when wiring)
External output	**Outputs**	8 total	8 total	External outputs CS1W-CT021: 4 points (NPN/PNP selectable) CJ1W-CT021: 2 points (NPN/PNP selectable)	8 total
	Output level	External output power supply: 5 to 24 VDC Switching capacity: 16 to 80 mA	External output power supply: 5 to 24 VDC Switching capacity: 16 to 80 mA	External output power 12 to 24 VDC/ 46 to 100 mA	External output power 5 to 24 VDC/ 16 to 80 mA
Internal consumption		300 mA max. at 5 VDC (supplied from rack).	300 mA max. at 5 VDC (supplied from rack).	CS1W-CT021: 5 VDC 450 mA CJ1W-CT021: 5 VDC 280 mA	5 VDC 400 mA max.

*1 : This specification item is only supported for Circular and Linear Counters (not for Simple Counters).
(*) C200H-CT021 is not discontinuation model.

[Wire connections]

Product discontinuation Model

C200H-CT001-V1

The connector is a Fujitsu FCN-361J040 (solder type)

Row B	Pin no.	Row A
Input A: 24 VDC	20	Input A: 12 VDC
Input A: 0 V	19	Input A: 5 VDC
Input B: 24 VDC	18	Input B: 12 VDC
Input B: 0 V	17	Input B: 5 VDC
Input Z: 24 VDC	16	Input Z: 12 VDC
Input Z: 0 V	15	Input Z: 5 VDC
	14	
	13	Control input IN1: 12/24 VDC
Control input IN1: 0 V	12	Control input IN1: 5 VDC
	11	Control input IN2: 12/24 VDC
Control input IN2: 0 V	10	Control input IN2: 5 VDC
	9	
Outputs 0 through 3 Power supply: 5 to 24 VDC	8	Output 0
	7	Output 1
Outputs 0 through 3, COM: 0 V	6	Output 2
	5	Output 3
Outputs 4 through 7 Power supply: 5 to 24 VDC	4	Output 4
	3	Output 5
Outputs 4 through 7, COM: 0 V	2	Output 6
	1	Output 7

C200H-CT002

The connector is a Fujitsu FCN-361J040 (solder type)

Row B	Pin no.	Row A
	20	
Input A: neg.	19	Input A: pos.
	18	
Input B: neg.	17	Input B: pos.
	16	
Input Z: neg.	15	Input Z: pos.
	14	
	13	Control input IN1: 12/24 VDC
Control input IN1: 0 V	12	Control input IN1: 5 VDC
	11	Control input IN2: 12/24 VDC
Control input IN2: 0 V	10	Control input IN2: 5 VDC
	9	
Outputs 0 through 3 Power supply: 5 to 24 VDC	8	Output 0
	7	Output 1
Outputs 0 through 3, COM: 0 V	6	Output 2
	5	Output 3
Outputs 4 through 7 Power supply: 5 to 24 VDC	4	Output 4
	3	Output 5
Outputs 4 through 7, COM: 0 V	2	Output 6
	1	Output 7

Recommendable replacement Model

CJ1W-CT021

Item		Connector 1 (CN1) Row B	Connector 1 (CN1) Row A	Pin No.
Counter 2	Z	CH2: 24 V	CH2: 12 V	20
		CH2: LD+	CH2: LD- / 0 V	19
	B	CH2: 24 V	CH2: 12 V	18
		CH2: LD+	CH2: LD- / 0 V	17
	A	CH2: 24 V	CH2: 12 V	16
		CH2: LD+	CH2: LD- / 0 V	15
Spare				14
Counter 1	Z	CH1: 24 V	CH1: 5 V	13
		CH1: LD+	CH1: LD- / 0 V	12
	B	CH1: 24 V	CH1: 5 V	11
		CH1: LD+	CH1: LD- / 0 V	10
	A	CH1: 24 V	CH1: 5 V	9
		CH1: LD+	CH1: LD- / 0 V	8
Spare				7
Digital Inputs [0-1]		I1: 24 V	I1: 0 V	6
		I0: 24 V	I0: 0 V	5
Spare				4
Digital Outputs [0-1] (NPN/PNP)		O1: PNP	O1: NPN	3
		O0: PNP	O0: NPN	2
Power Supply (to feed the outputs)		+PS:12 to 24 V	-PS: 0 V	1

CS1W-CT021

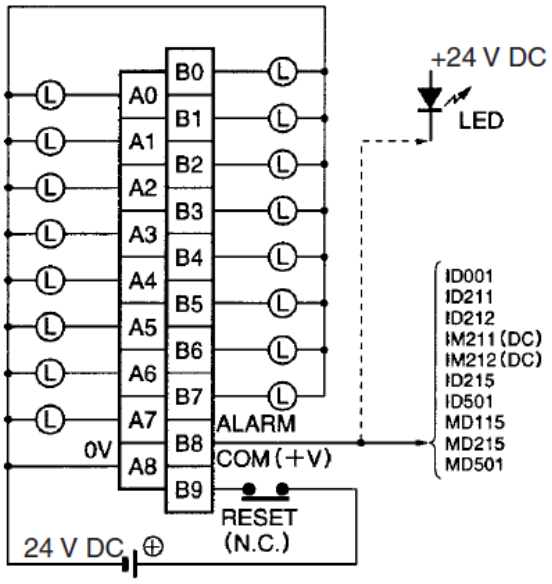
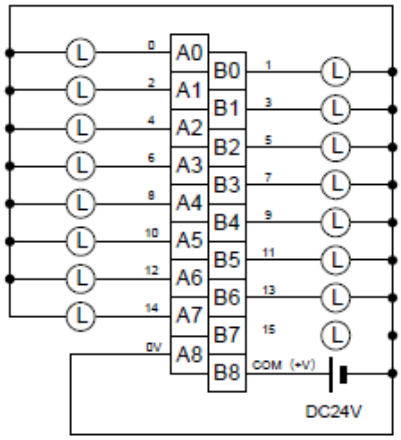
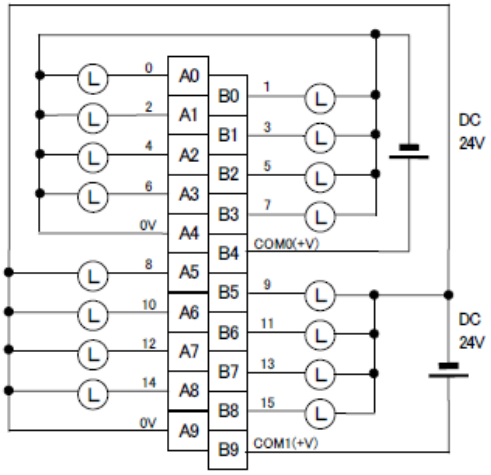
Item		Connector 2 (CN2) Row A	Connector 2 (CN2) Row B	Pin No.	Connector 1 (CN1) Row A	Connector 1 (CN1) Row B	Pin No.
Power Supply (to feed the outputs)		-PS: 0V	+PS: 12 to 24V	1	-PS: 0V	+PS:12 to 24V	1
Digital Outputs [0-3] (NPN/PNP)		O2: NPN	O2: PNP	2	O0: NPN	O0: PNP	2
		O3: NPN	O3: PNP	3	O1: NPN	O1: PNP	3
Spare				4			4
Digital Inputs [0-3]		I2: 0V	I2: 24V	5	I0: 0V	I0: 24V	5
		I3: 0V	I3: 24V	6	I1: 0V	I1: 24V	6
Spare				7			7
Counter 1 & Counter 2	A	CH2: LD- / 0V	CH2: LD+	8	CH1: LD- / 0V	CH1: LD+	8
		CH2: 12V	CH2: 24V	9	CH1: 5V	CH1: 24V	9
	B	CH2: LD- / 0V	CH2: LD+	10	CH1: LD- / 0V	CH1: LD+	10
		CH2: 12V	CH2: 24V	11	CH1: 5V	CH1: 24V	11
	Z	CH2: LD- / 0V	CH2: LD+	12	CH1: LD- / 0V	CH1: LD+	12
		CH2: 12V	CH2: 24V	13	CH1: 5V	CH1: 24V	13
Spare				14			14
Counter 3 & Counter 4*	A	CH4: LD- / 0V	CH4: LD+	15	CH3: LD- / 0V	CH3: LD+	15
		CH4: 12V	CH4: 24V	16	CH3: 5V	CH3: 24V	16
	B	CH4: LD- / 0V	CH4: LD+	17	CH3: LD- / 0V	CH3: LD+	17
		CH4:12V	CH4: 24V	18	CH3: 5V	CH3: 24V	18
	Z	CH4: LD- / 0V	CH4: LD+	19	CH3: LD- / 0V	CH3: LD+	19
		CH4:12V	CH4: 24V	20	CH3: 5V	CH3: 24V	20

* CS1W-CT041 High-speed Counter Unit only.

< Transistor Output Unit C200H-OD21A >
[Specifications]

Product discontinuation Model	Recommendable replacement Model
C200H-OD21A 24 VDC, 1.0 A, Sourcing, Terminal block, load short circuit protection, 16 outputs	**CJ1W-OD212** 12-24 VDC, 0.5 A, Sourcing, Terminal block, load short circuit protection, 16 outputs Differences of specification are as follows: 1) Terminal block 2) Number of circuit (16 points/common x1 circuit -> 8 points/common x2 circuits) 3) Output circuit specification Output capacity (1 A/point, 4 A/Unit -> 0.5 A/point, 5 A/Unit) Residual voltage (0.8 V -> 1.5 V) ON response time (0.1 ms -> 0.5 ms) OFF response time (0.3 ms -> 1 ms) 4) Internal current consumption (5 VDC: 160 mA -> 170 mA) 5) External power supply (24 VDC: 35 mA -> 40 mA) 6) Alarm output (Supported -> Not supported) **CS1W-OD212** 24 VDC, 0.5 A, Sourcing, Terminal block, load short circuit protection, 16 outputs Differences of specification are as follows: 1) Terminal block 2) Output circuit specification Output capacity (1 A/point, 4 A/Unit 0.5 A/point, 5 A/Unit) Residual voltage (0.8 V -> 1.5 V) ON response time (0.1 ms -> 0.5 ms) OFF response time (0.3 ms -> 1 ms) 3) Internal current consumption (5 VDC: 160 mA -> 100 mA,) 4) Alarm output (Supported -> Not supported)

[Wire connections]

Product discontinuation Model	Recommendable replacement Model
C200H-OD21A 	**CJ1W-OD212**  **CS1W-OD212** 

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