

# C200H-NC112

## OMRON

### SYSMAC - System C200H Special I/O Modules – Single-axis Position Control Modules



C200H-NC112

*Presented by - MRO Electric and Supply Company, Inc.*

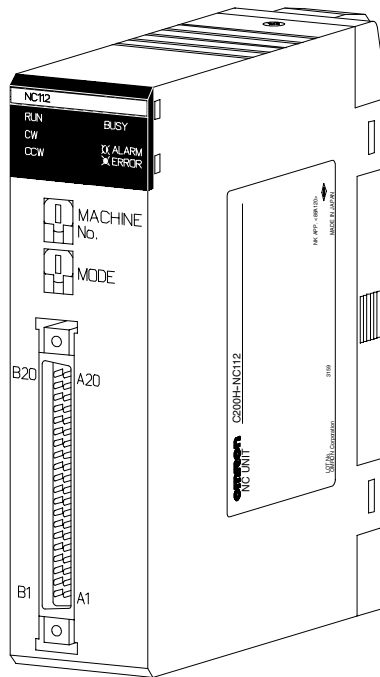
*For Product Needs:*

*Email: [sales@MROELECTRIC.COM](mailto:sales@MROELECTRIC.COM)*

*Call: **1-800-691-8511***

*Fax: **919-415-1614***

*<http://www.MROELECTRIC.com/>*



C200H-NC112

**General Information**

Position control modules provide either a step and direction pulse train or CW/CCW pulse trains to control a single-axis stepper or servo motor driver. Interface signals include CW and CCW limits, origin approach, origin stop, emergency stop, and interrupt signals. Automatic backlash and origin offset functions are now included for precise positioning requirements. Move parameters can be set up in either ladder logic, or by connecting the hand-held programming console, and are stored in battery-backed memory. Extensive diagnostics are also available to the PLC for quick error detection and troubleshooting.

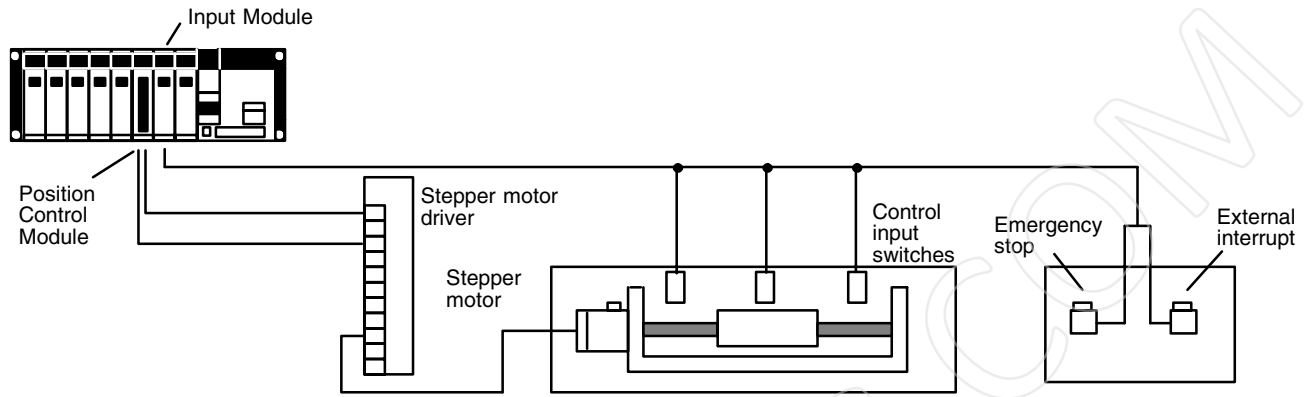
**Features**

- ◆ Pulse output for stepper motor or servo motor driver
- ◆ Origin and backlash compensation for precision positioning
- ◆ Teach mode or storage of calculated movement parameters
- ◆ Internal diagnostics
- ◆ External signal interface for CW, CCW, origin, emergency stop, mode, and interrupt
- ◆ Parameters, speeds, and positions set in CPU DM area

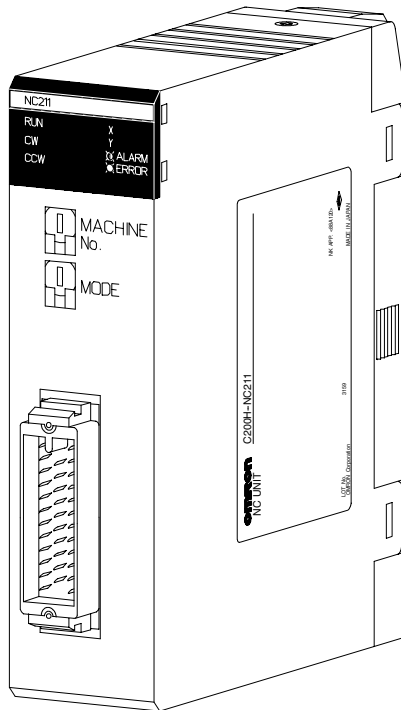
**Specifications**

<b>Part number</b>		<b>C200H-NC112</b>
<b>Number of axes</b>		One axis per module
<b>Control system</b>		Automatic trapezoidal acceleration/deceleration
<b>Position</b>	<b>Data points</b>	53
	<b>Range</b>	-8,388,607 to +8,388,606 pulses
<b>Speed</b>	<b>Data points</b>	15
	<b>Range</b>	1 to 250,000 pulses per second
<b>Speed adjustment rate</b>		2 to 2,000 pps/s
<b>Origin search</b>	<b>Origin proximity</b>	Selectable; absent, Normally Open, Normally Closed
	<b>Origin signal</b>	Selectable; Normally Open or Normally Closed input
	<b>Origin compensation</b>	0 to 9,999 pulses
	<b>Origin search speed</b>	High speed and proximity speed available
<b>Backlash compensation</b>		0 to 9,999 pulses
<b>Manual operations</b>		High-speed jog, low-speed jog, inching
<b>Manual</b>		W128

### Typical Application



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C200H-NC211

**General Information**

The two-axis position control module provides signals to control two servo motor drivers either independently or simultaneously. Interface signals include CW and CCW, origin approach, origin, stop, emergency stop, and interrupt signals. Automatic backlash and origin correction functions are now included for precise positioning requirements. Move parameters can be set up in either ladder logic, or by connecting the hand-held Programming Console, and are stored in battery-backed memory. Extensive diagnostics are available through the PLC for quick error detection and troubleshooting.

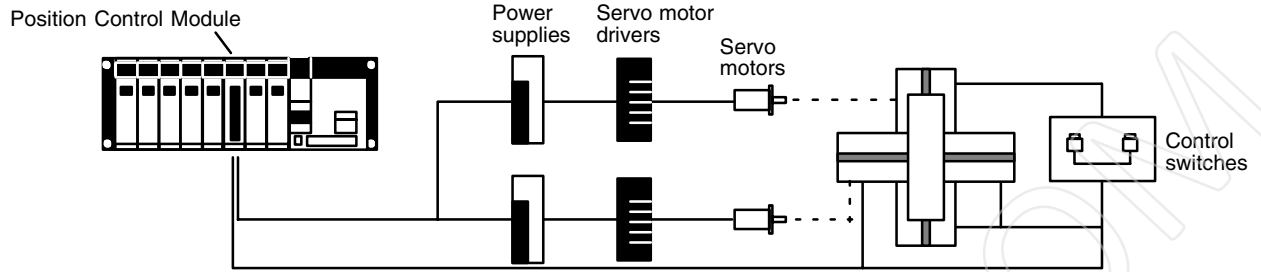
**Features**

- ◆ 2 axes of control
- ◆ Provides independent or simultaneous axis control
- ◆ Origin and backlash compensation
- ◆ Teach mode and external display for fast and efficient programming and diagnostic functions
- ◆ Linear interpolation capability

**Specifications**

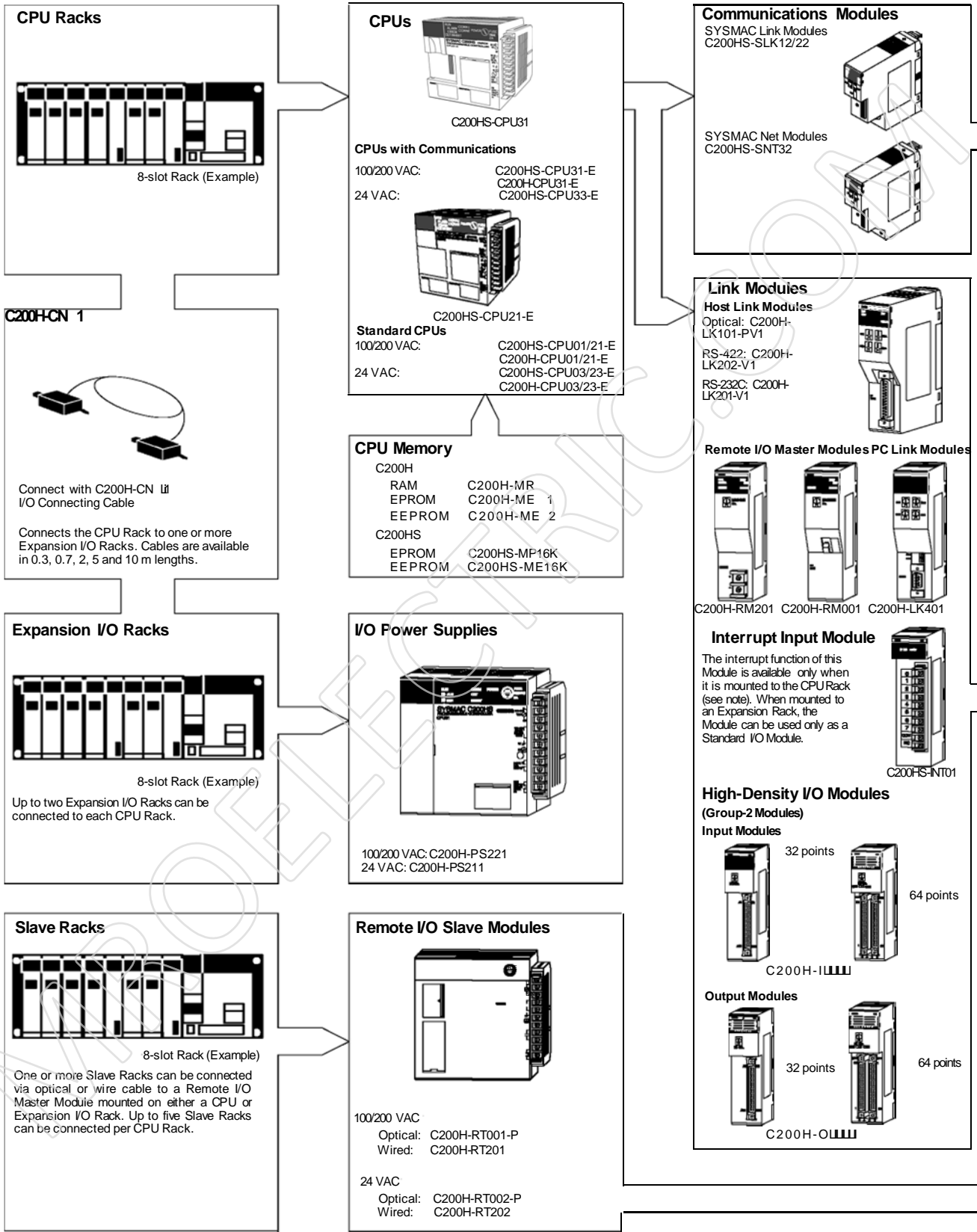
<b>Part number</b>		<b>C200H-NC211</b>
<b>Number of axes</b>		Two axes per module
<b>Control system</b>		Automatic trapezoidal acceleration/deceleration
<b>Position</b>	<b>Data points</b>	53 per axis
	<b>Range</b>	-8,388,607 to +8,388,606 pulses
<b>Speed</b>	<b>Data points</b>	15
	<b>Range</b>	1 to 250,000 pulses per second
<b>Acceleration/deceleration</b>		2 to 2,000 pps/1 ms
<b>Origin search</b>	<b>Origin proximity</b>	Selectable; absent, Normally Open input, Normally Closed input
<b>Origin search</b>	<b>Origin signal</b>	Selectable; Normally Open or Normally Closed input
	<b>Origin compensation</b>	0 to +9,999 pulses
	<b>Origin search speed</b>	Selectable; high speed and proximity speed available Stop at origin signal after proximity signal has turned ON Stop at origin signal after proximity signal has turned OFF
<b>Backlash compensation</b>		0 to 9,999 pulses
<b>Manual operations</b>		High-speed jog, low-speed jog, inch
<b>Manual</b>		W166

### Typical Application



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# System Configuration

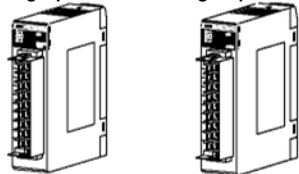


**Note:** Only one Interrupt Input Module can be used with a CPU.

# System Configuration

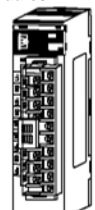
## Special I/O Modules

Analog Input Modules Analog Output Modules



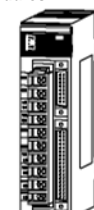
C200H-AD001/002 C200H-DA001

Temperature Sensor Modules



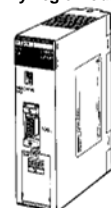
C200H-TS001

Temperature Control Modules



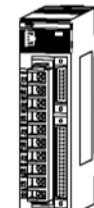
C200H-TC001

Fuzzy Logic Module



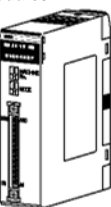
C200H-FZ001

PID Control Modules



C200H-PID01

High Speed Counter Modules



C200H-CT001

Position Control Modules



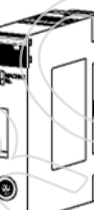
C200H-NCL01

Cam Position Modules



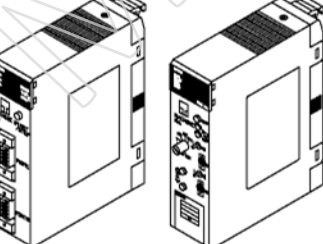
C200H-CP114

ID Sensor Module



C200H-IDS01

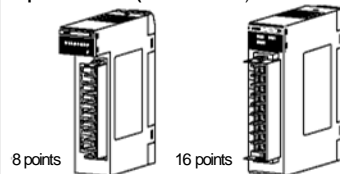
ASCII Module Voice Module



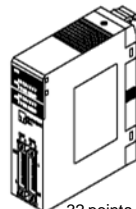
C200H-ASC02 C200H-OV001

## I/O Modules

Input Modules (C200H-I0000)

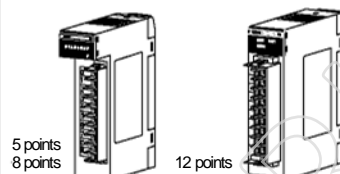


8 points 16 points  
(AC, DC, AC/DC, transistor inputs)

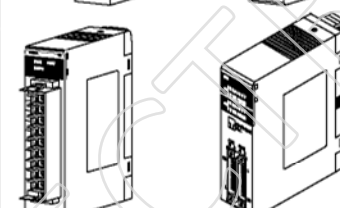


32 points  
(Treated as Special I/O Module)

Output Modules (C200H-O0000)



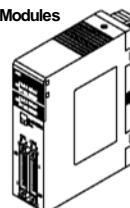
5 points 12 points  
8 points



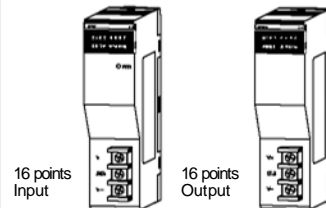
16 points 32 points  
(Treated as Special I/O Module)

DC Input Transistor Output Modules

C200H-M0000  
(16 inputs and 16 outputs; treated as Special I/O Module.)

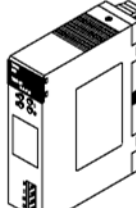


B7A Interface Modules



16 points Input 16 points Output  
C200H-B7A11 C200H-B7A01

Analog Timer Module

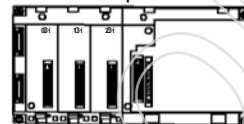


C200H-TM001

## Backplanes

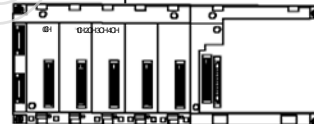
The same Backplanes are used for CPU, Expansion I/O, and Slave Packs.

3-slot Backplane



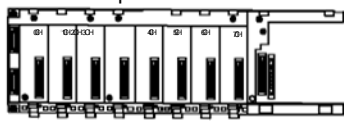
C200H-BC031-V2

5-slot Backplane



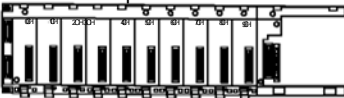
C200H-BC051-V2

8-slot Backplane



C200H-BC081-V2

10-slot Backplane



C200H-BC101-V2