

CJ1W-NC□□4

Position control units

Point-to-point positioning controller with pulse train output and motion control unit functionality

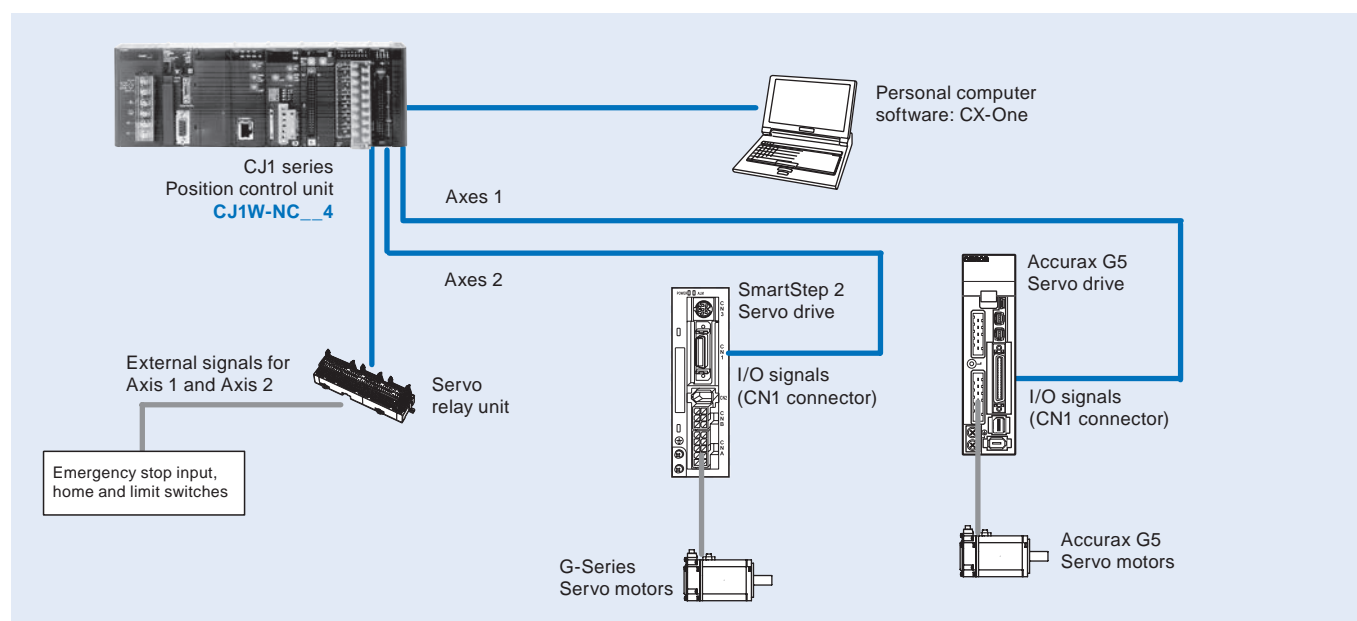
- Position control units with 2 or 4 axes
- Position and speed control
- Linear interpolation and feeder control function
- Electronic CAM profiles and axes synchronization
- Positioning of 500 points per axis done from memory
- S-curve acceleration/deceleration, origin search, backlash compensation, and other features are also supported.
- Programming languages: ladder, function blocks.
- Use Windows-based support software to easily create positioning data and store data and parameters in files.



Function

These position control units support positioning control via pulse-train outputs. Positioning is performed using trapezoidal or S-curve acceleration and deceleration. Models are available with 2 or 4 axes control, and can be used in combination with servo drives or stepping motors that accept pulse-train control. When these units are used in a CJ2 PLC CPU can perform also synchronous operation by use of electronic CAMs and other function blocks.

System configuration

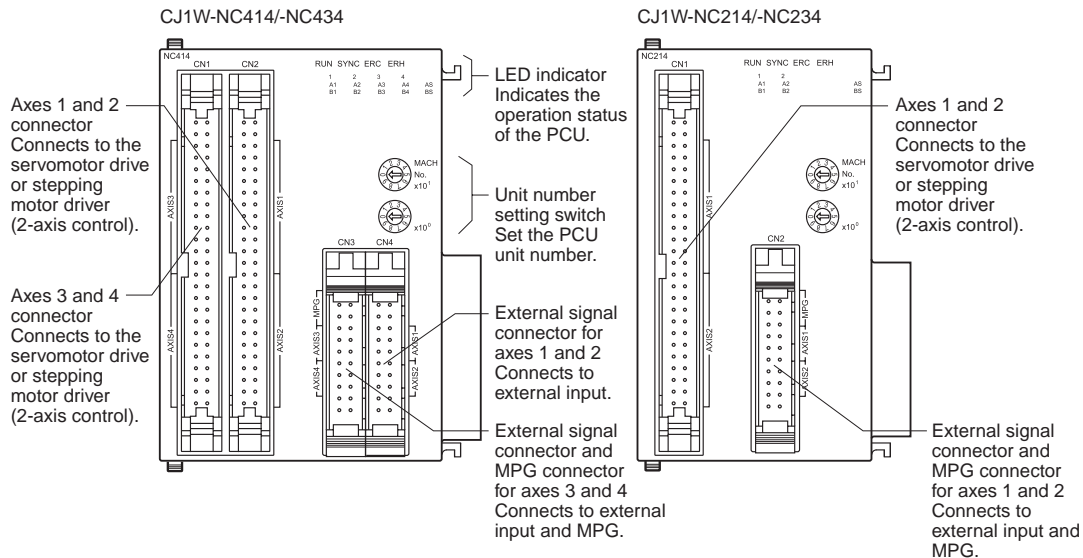


Specifications

Model		CJ1W-NC214 CJ1W-NC234	CJ1W-NC414 CJ1W-NC434
Unit name		Position control unit	
Classification		CJ series special I/O units	
Applicable PLCs		CJ series	
Unit numbers		0 to 94	
Maximum number of units per rack		5 units	
Maximum number of units per CJ system		20 units (3 expansion racks maximum)	
Occupied unit		2	
Control method		Open-loop control by pulse train output	
Control output signals		CJ1W-NC□14: Open-collector output CJ1W-NC□34: Line-driver output	
Controlled axes		2	4
I/O allocations		Axis operating memory area	
Control function		Allocated in one of the following areas(user-specified): CIO, WR, HR, DM or EM area.	
		Operating modes	
		Direct operation or memory operation	
		Linear interpolation	2 axes maximum
		Circular interpolation	2 axes maximum
		Interrupt feeding	Independent, 2 axes
		Position data	-2147483648 to +2147483647
		No. of positions	500 per axis
		Speed data	4 Mpps maximum speed (NC234/434) or 500 kpps (NC214/414)
		No. of speeds	500 per axis
		Acceleration/deceleration times	0 to 250 s (time to max. speed)
		Acceleration/deceleration curves	Trapezoidal or S-curve
Auxiliary functions		Override	Multiplies the axis command speed by a specified ratio. Value: 0.01% to 500.00%
		Software limits	Limits software operation for controlling positioning
		Backlash compensation	Compensates for the amount of play in the mechanical system according to a set value
		Torque limit	Restricts the torque upper limit during position control
Saving data in PCU		Flash memory	
Ambient operating temperature		0 to 55°C	
External power supply		24 VDC	
Internal current consumption		270 mA or less at 5 VDC	310 mA or less at 5 VDC
Weight		170 g	220 g

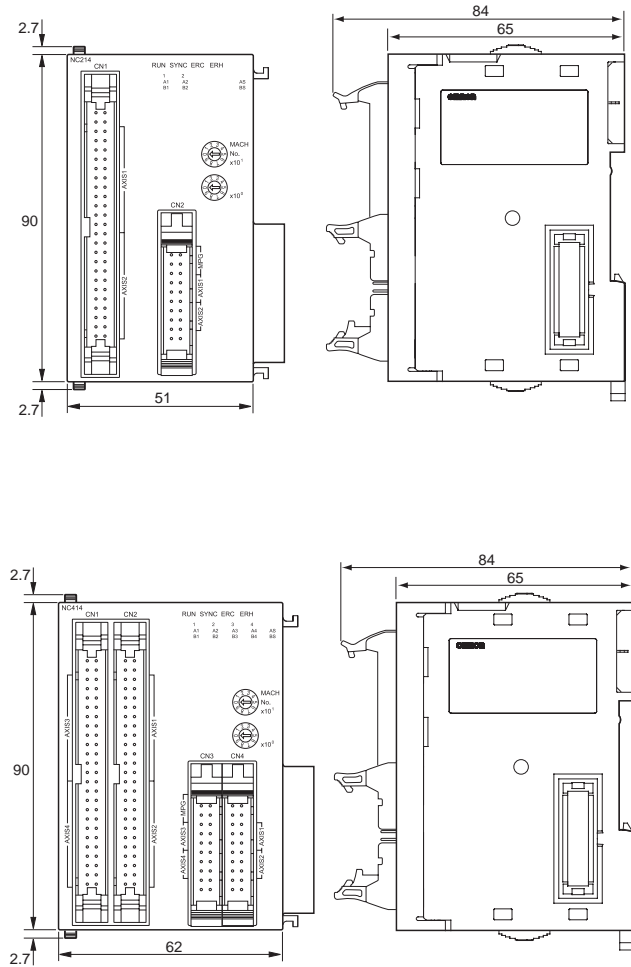
Nomenclature

CJ1W-NC214/234/414/434 - position control unit



Dimensions

CJ1W-NC214/234/414/434 - position control unit



Ordering information

Position control unit

Name	Model
2 axes position control unit. Open-collector output.	CJ1W-NC214
4 axes position control unit. Open-collector output.	CJ1W-NC414
2 axes position control unit. Line-driver output.	CJ1W-NC234
4 axes position control unit. Line-driver output.	CJ1W-NC434

Servo drive cables

Note: Refer to selected servo systems section for cable and servo relay units information.

Computer software

Specifications	Model
CX-One version 4.0 or higher	CX-One

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.
To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.