## CJ1W-NC $\square \square 3$

## Position control unit

## Point-to-point positioning controller with pulse train output

- Position control units with 1,2 or 4 axes
- Positioning can done by direct ladder commands
- Position and speed control
- Linear interpolation
- Interrupt feeding function
- Positioning of 100 points done from memory
- S-curve acceleration/deceleration, origin search, backlash compensation, and other features are also supported.
- Positioning data is saved in internal flash memory, eliminating the need to maintain a backup battery.
- Use Windows-based support software (CX-position) 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 1,2, or 4 axes control, and can be used in combination with servo drives or stepping motors what accept pulse-train control.

## System configuration



Specifications

| Model | $\begin{aligned} & \text { CJ1W-NC113 } \\ & \text { CJ1W-NC133 } \end{aligned}$ | $\begin{aligned} & \text { CJ1W-NC213 } \\ & \text { CJ1W-NC233 } \end{aligned}$ | $\begin{aligned} & \text { CJ1W-NC413 } \\ & \text { CJ1W-NC433 } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Unit name | Position contro |  |  |
| Classification | Special I/O unit |  |  |
| Unit numbers | 0 to 95 |  | 0 to 94 |
| Control method | Open-loop con | utput |  |
| Control output interface | $\begin{aligned} & \text { CJ1W-NC } \square 13 \\ & \text { CJ1W-NC } \square 33 \end{aligned}$ |  |  |
| Controlled axes | 1 | 2 | 4 |
| Operating modes | Direct operatio | tion |  |
| Data format | Binary (hexade |  |  |
| Affect on scan time for end refresh | 0.29 to 0.41 ms |  |  |
| Affect on scan time for IOWR/IORD | 0.6 to 0.7 ms m |  |  |
| Startup time | $2 \mathrm{~ms} \mathrm{max}. \mathrm{(refe}$ | ual for condition |  |
| Position data | -1,073,741,823 | pulses |  |
| No. of positions | 100 per axis |  |  |
| Speed data | 1 to 500 kpps ( |  |  |
| No. of speeds | 100 per axis |  |  |
| Acceleration/deceleration times | 0 to 250 s (time |  |  |
| Acceleration/deceleration curves | Trapezoidal or |  |  |
| Saving data in CPU | Flash memory |  |  |
| Windows-based support software | CX-position (W |  |  |
| Ambient operating temperature | 0 to $55^{\circ} \mathrm{C}$ |  | 0 to $50^{\circ} \mathrm{C}$ |
| External power supply | 24 VDC $\pm 10 \%$, | river only) | 24 VDC $\pm 5 \%$, |

## Nomenclature

Position control unit


## Dimensions

## Position control unit



## Ordering information

## Position control unit

| Name | Model |
| :--- | :--- |
| 1 axis position control unit. Open-collector output. | CJ1W-NC113 |
| 2 axes position control unit. Open-collector output. | CJ1W-NC213 |
| 4 axes position control unit. Open-collector output. | CJ1W-NC413 |
| 1 axis position control unit. Line-driver output. | CJ1W-NC133 |
| 2 axes position control unit. Line-driver output. | CJ1W-NC233 |
| 4 axes position control unit. Line-driver output. | CJ1W-NC433 |

## Servo drive cables

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

## Computer software

| Specifications | Model |
| :--- | :--- |
| CX-One | CX-One |

