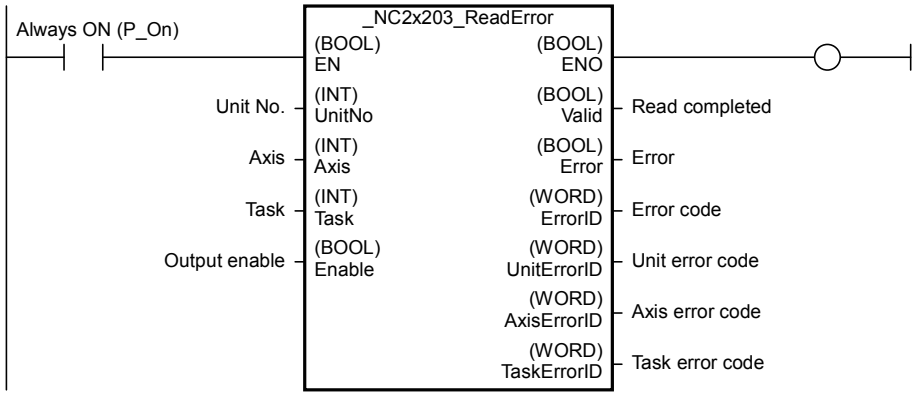
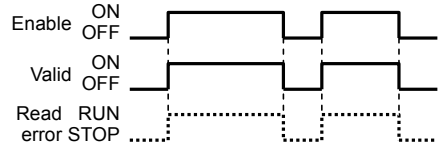
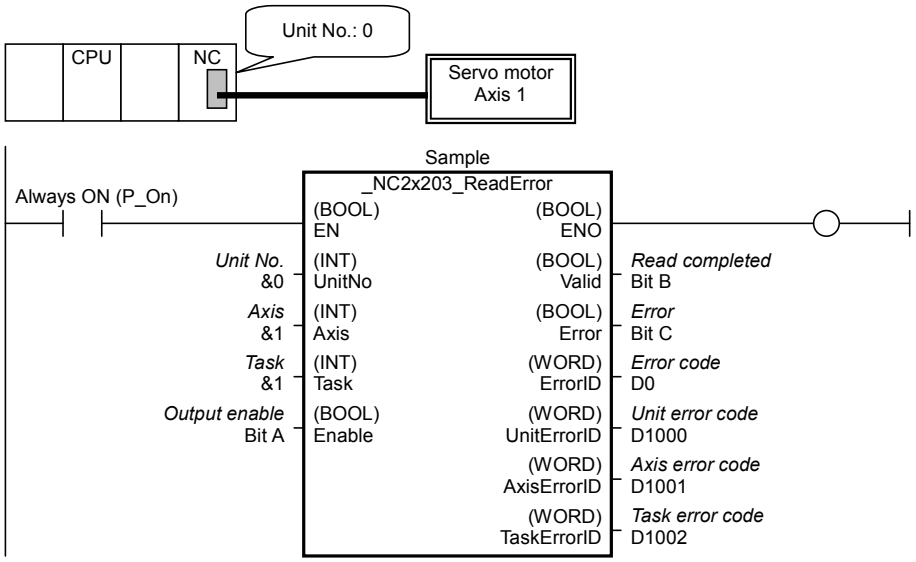
| NC2x 203 | Read Error _NC2x203_ReadError |
|---|---|

| | | |
|---|---|---|
| **Basic function** | Reads error information of a unit. | |
| **Symbol** |  | |
| **File name** | Lib\FBL\omronlib\PositionController\NC2x_NC2x203_ReadError10.cxf | |
| **Applicable models** | Position Control Units | CJ1W-NC214/234/414/434 |
| | CPU Unit | CJ1*-CPU**H Version 3.0 or later<br>CJ1M-CPU** Version 3.0 or later<br>CP1H<br>CJ2H-CPU**(-EIP) |
| | CX-Programmer | Version 5.0 or later |
| **Languages in function block definitions** | Ladder programming | |
| **Conditions for usage** | None. | |
| **Function description** | ・For the axis and task specified in "Unit No. (UnitNo)", "Axis (Axis)" and "Task (Task)", error information will be continuously reflected in "Unit error code (UnitErrorID)", "Axis error code (AxisErrorID)" and "Task error code (TaskErrorID)" while "Output enable (Enable)" turns ON.<br>・"Read completed (Valid)" will turn ON when the valid error codes are output.<br>・"Error flag (Error)" will be turned ON and "Error code (ErrorID)" will be output if an error occurs for the FB. This will not occur for error in other FBs or other instances of the FB.<br>・These statuses (Error/ErrorID) will be reset when "Output enable (Enable)" turns OFF.<br>  | |
| **Kind of FB definition** | Always execution type.<br>Connect the EN input to the Always ON Flag (P_On).<br>The same instance cannot be used in two or more places. | |
| **EN input condition** | ・Connect the EN input to the Always ON Flag (P_On).<br>If another bit is connected to EN, the FB outputs will be held when the connected bit turns OFF. | |
| **Restrictions Other** | ・This FB does not recognize the existence of the axis and task specified in "Unit No. (UnitNo)", "Axis (Axis)" and "Task (Task)". If these input variables have not been set correctly, the FB may not work normally.<br>・This FB outputs the status by referring to the axis in appropriate memory area and "Read completed (Done)" is turned ON, even when the target axis is not connected.<br>・If the Operating Memory Area for the axis (task) is not set, "Axis error code (AxisErrorID)" ("Task error code (TaskErrorID)") will output #0000. | |

| | |
|---|---|
| **Application example** | When bit A is turned ON, the error information of the axis (Axis 1) connected to the Position Control Unit of unit number 0 will be read out, and output for D1001 and D1002.<br>  |
| **Related manuals** | CJ-series Position Control Unit Operation Manual (W477)<br>12-5 Reading Error Codes<br>12-6 Error Code List |

**■Variable Tables**

**Input Variables**

| Name | Variable name | Data type | Default | Range | Description |
|---|---|---|---|---|---|
| EN | EN | BOOL | | | 1(ON): FB started<br>0(OFF): FB not started |
| Unit No. | UnitNo | INT | &0 | &0 to &94 | Specify the unit number. |
| Axis | Axis | INT | &1 | &1 to &4 | Specify the axis number. |
| Task | Task | INT | &1 | &1 to &4 | Specify the task number. |
| Output enable | Enable | BOOL | 0(OFF) | | ↑: Error information output enabled<br>↓: Error information output disabled |

**Output Variables**

| Name | Variable name | Data type | Range | Description |
|---|---|---|---|---|
| ENO | ENO | BOOL | | 1(ON): FB operating normally<br>0(OFF): FB not started / FB ended with error |
| Read completed | Valid | BOOL | | Turns ON when the valid error codes are output. |
| Error | Error | BOOL | | Turns ON when an error has occurred in the FB. Refer to "Error code (ErrorID)" for details. |
| Error code | ErrorID | WORD | | Returns the error code when an error occurred in the FB. Refer to "■Error code list" for details. |
| Unit error code | UnitErrorID | WORD | | Outputs the unit error code. |
| Axis error code | AxisErrorID | WORD | | Outputs the axis error code. |
| Task error code | TaskErrorID | WORD | | Outputs the task error code. |

**■Error code list**

| Error name | Error code | Probable cause | Clearing method |
|---|---|---|---|
| Input variable out of range | #0001 | The value of input variable of this FB is out of valid range. | Set the value of input variable within the specified range. |
| Operating memory area allocation out of range | #0002 | The allocation of Axis Operating Memory Area of Common Parameter is out of allowable setting range. | Correct the allocation of Axis Operating Memory Area of Common Parameter so that it falls within the allowable setting range of data. |

**■Version History**

| Version | Date | Contents |
|---|---|---|
| 1.00 | 2009.06. | Original production. |

**■Note**

This document explains the function of the function block.
It does not provide information of restrictions on the use of Units and Components or combination of them. For actual applications, make sure to read the operation manuals of the applicable products.