

<b>NC2x 403</b>	<b>Save Parameter _NC2x403_SaveParameter</b>
---------------------	--

<b>Basic function</b>	Saves the parameters.						
<b>Symbol</b>							
<b>File name</b>	Lib\FBL\omronlib\PositionController\NC2x\ _NC2x403_SaveParameter10.cxf						
<b>Applicable models</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Position Control Units</td> <td>CJ1W-NC214/234/414/434</td> </tr> <tr> <td>CPU Unit</td> <td>CJ1*-CPU**H Version 3.0 or later CJ1M-CPU** Version 3.0 or later CP1H CJ2H-CPU**(-EIP)</td> </tr> <tr> <td>CX-Programmer</td> <td>Version 5.0 or later</td> </tr> </table>	Position Control Units	CJ1W-NC214/234/414/434	CPU Unit	CJ1*-CPU**H Version 3.0 or later CJ1M-CPU** Version 3.0 or later CP1H CJ2H-CPU**(-EIP)	CX-Programmer	Version 5.0 or later
Position Control Units	CJ1W-NC214/234/414/434						
CPU Unit	CJ1*-CPU**H Version 3.0 or later CJ1M-CPU** Version 3.0 or later CP1H CJ2H-CPU**(-EIP)						
CX-Programmer	Version 5.0 or later						
<b>Languages in function block definitions</b>	Ladder programming						
<b>Conditions for usage</b>	None.						
<b>Function description</b>	<ul style="list-style-type: none"> <li>• For the unit specified in "Unit No. (UnitNo)", the parameter present values of the Position Control Unit will be saved in the non-volatile memory inside the Position Control Unit when "Start (Execute)" turns ON.</li> <li>• "Save completed (Done)" is turned ON when the parameter saving operation for the FB has been completed. This flag will not be turned ON if the positioning operation is canceled because another operation has been started from a different instance, for a deceleration stop, or because an error has occurred.</li> <li>• "Busy (Busy)" will be set when the "Start (Execute)" is turned ON. "Busy (Busy)" will be reset when any of "Save completed (Done)" or "Error (Error)" is turned ON. Even if an error occurs when the input variable is out of the range, etc., "Busy (Busy)" will be set for at least one cycle.</li> <li>• "Error (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.</li> <li>• These statuses (Done/Error/ErrorID) will be reset when "Start (Execute)" turns OFF. If "Start (Execute)" turns OFF before the positioning operation has been completed, the status will be set for at least one cycle when corresponding conditions have occurred.</li> </ul>						
<b>Kind of FB definition</b>	Always execution type. Connect the EN input to the Always ON Flag (P_On). The same instance cannot be used in two or more places.						
<b>EN input condition</b>	<ul style="list-style-type: none"> <li>• Connect the EN input to the Always ON Flag (P_On).</li> <li>• If another bit is connected to EN, the FB outputs will be held when the connected bit turns OFF.</li> </ul>						
<b>Restrictions Other</b>	<ul style="list-style-type: none"> <li>• This FB does not recognize the existence of the axis specified in "Unit No. (UnitNo)". If this input variable has not been set correctly, the FB may not work normally.</li> <li>• This FB uses bits of the Position Control Unit. Therefore, do not turn these bits ON or OFF. For the same reason, do not use these bits for coil outputs (OUT commands). Refer to the "■Used bits list" for the bits used by this FB.</li> </ul>						

<p><b>Application example</b></p>	<p>Turning OFF bit A and then ON will save the parameters of the Position Control Unit of unit number 0.</p>
<p><b>Related manuals</b></p>	<p>CJ-series Position Control Unit Operation Manual (W477) 8-7 Saving Data 12-6 Error Code List</p>

**Variable Tables**  
**Input Variables**

Name	Variable name	Data type	Default	Range	Description
EN	EN	BOOL			1(ON): FB started 0(OFF): FB not started
Unit No.	UnitNo	INT	&0	&0 to &94	Specify the unit number.
Start	Execute	BOOL	0(OFF)		↑ : Starts the parameter saving.

**Output Variables**

Name	Variable name	Data type	Range	Description
ENO	ENO	BOOL		1(ON): FB operating normally 0(OFF): FB not started / FB ended with error
Save completed	Done	BOOL		Turns ON when the parameter saving operation has been completed.
Busy flag	Busy	BOOL		Turns ON when FB is in the process.
Error flag	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.

**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.
Unit error	#1001	An error in individual unit has occurred.	Check "Unit common error code". Identify the error cause from the Operation Manual of the Position Control Unit.
Unit initializing	#2001	The Position Control Unit is in process of initialization.	Execute the FB after the Position Control Unit initialization process has been completed.
Command disabled	#2300	FB commands have not been accepted.	Execute the FB after putting the unit in status that can accept commands.
Save data	#300E	"Save data" of the PCU Control Output Memory area has been operated by the outside of the FB.	Do not operate each bit which the active FB is operating, by the external unit of the FB. Do not use it on OUT command.

**Used bits list**

Memory area	Name	Data type	Address	Note
PCU Control Output Memory area	Save data	BOOL	n+00.14	

**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.