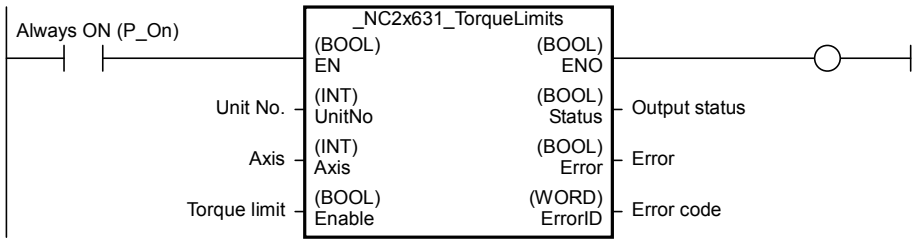
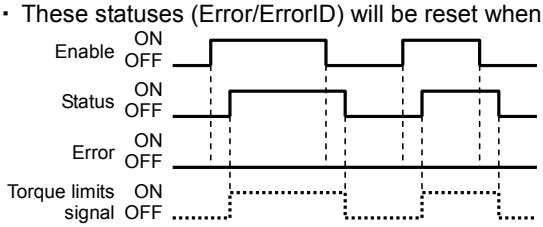
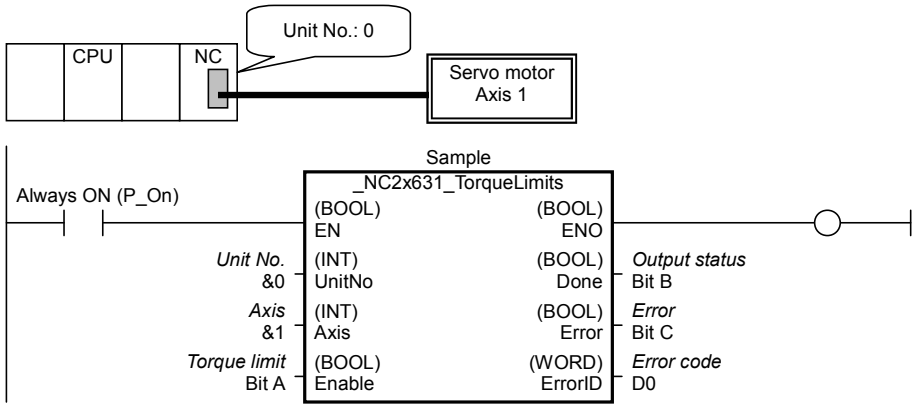
NC2x 631	Torque Limits _NC2x631_TorqueLimits

Basic function	Outputs the torque limit signal.	
Symbol		
File name	Lib\FBL\omronlib\PositionController\NC2x_NC2x631_TorqueLimits10.cxf	
Applicable models	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
Languages in function block definitions	Ladder programming	
Conditions for usage	None.	
Function description	・For the axis specified in "Unit No. (UnitNo)" and "Axis No. (Axis)", the torque limit output signal will turn ON when “Torque limit (Enable)” is turned ON, and the signal will turn OFF when it’s turned OFF. ・"Output status (Status)" will reflect the torque limits signal status of the applicable axis. ・"Error (Error)" will be turned ON "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. ・These statuses (Error/ErrorID) will be reset when "Torque limit (Enable)" turns OFF. 	
Kind of FB definition	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.	
EN input condition	・Connect the EN input to the Always ON Flag (P_On). 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 specified in "Unit No. (UnitNo)" and "Axis (Axis)". If these input variables have not been set correctly, the FB may not work normally. ・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.	
Application example	Turning ON bit A will enable the torque limit output signal of the axis (Axis1) connected to the Position Control Unit of unit number 0. 	
Related manuals	CJ-series Position Control Unit Operation Manual (W477) 9-4 Torque Limit	

■**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.
Axis	Axis	INT	&1	&1 to &4	Specify the axis number.
Torque limit	Enable	BOOL	0(OFF)		⌐↑: Torque limit enabled ⌐↓: Torque limit disabled

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
Output status	Status	BOOL		1(ON): The torque limits signal is output status. 0(OFF): The torque limits signal is stopping status.
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.

■**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.

■**Used bits list**

Memory area	Name	Data type	Address	Note
Manual Operation Command Memory area	Torque limit output	BOOL	A+00.03	

■**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.