

NCF 001	Establish/Release connection _NCF001_Connection
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Basic function	Controls MECHATROLINK communications.	
Symbol		
File name	Lib\FBL\omronlib\PositionController\NCF_NCF001_Connection11.cxf	
Applicable models	Position Control Unit	CJ1W-NCF71, CS1W-NCF71
	CPU Unit	CS1*-CPU**H Unit Version 3.0 or later CJ1*-CPU**H Unit Version 3.0 or later CJ1M-CPU** Unit Version 3.0 or later CP1H
	CX-Programmer	Version 5.0 or later
Languages in function block definitions	Ladder programming	
Conditions for usage	None	
Function description	<p>Establishes the connection for the Position Control Unit specified in "Unit No. (UnitNo)" when the Connect (Connection) is turned ON, or releases the connection when the Connect (Connection) is turned OFF. For details, refer to the sections of the manual listed in the Related manuals below.</p> <p>The Connection status flag (Status) indicates the MECHATROLINK communications status.</p> <p>The Error flag (Error) and Error code (ErrorID) will be output when an error related to this FB occurs. They will not be output for errors in other FBs or other instances.</p>	
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 uses Connect Bit of the Position Control Unit. Therefore, do not turn this bit ON or OFF. For the same reason, do not use this bit for coil outputs (OUT commands).	

<p>Application example</p>	<p>When the Bit A is turned ON from OFF, MECHATROLINK communications on the Position Control Unit with the Unit No. 0 is started.</p>
<p>Related manuals</p>	<p>Position Control Units OPERATION MANUAL (W426-E1) 6-3 MECHATROLINK Communications Control 12-4 Error Codes</p>

■Variable Tables
Input Variables

Name	Variable name	Data type	Default	Range	Description
EN	EN	BOOL			1 (ON): Starts FB 0 (OFF): Does not start FB
Unit No.	UnitNo	INT	&0	&0~&15	Specify the unit number.
Connect	Connection	BOOL	0(OFF)		↑ : Establishes connection ↓ : Releases connection

Output Variables

Name	Variable name	Data type	Range	Description
ENO	ENO	BOOL		1 (ON): FB operating normally 0 (OFF): FB not operating normally •FB not started •Input variable out of the range •FB ended with error
Connection status flag	Status	BOOL		1 (ON): MECHATROLINK communications executing 0 (OFF): MECHATROLINK communications stopped
Normal	OK	BOOL		1 (ON) indicates that status of Connect and the actual connection status matches with each other.
Error flag	Error	BOOL		Turns ON when an error has occurred in the FB.
Error code	ErrorID	WORD		Returns the error code when an error has occurred in the FB. Refer to the <i>Related Manuals</i> for details on errors. A code of #0000 will be returned if any of the following conditions is satisfied. •Input variable is out of range.

■Version History

Version	Date	Contents
1.00	2005.01.	Original production
1.10	2007.11	The timing for reflecting Input Variable "Unit No. (UnitNo)" has been changed.
		What Output Variables "Normal (OK)" and "Error flag (Error)" do has been changed.

■Upgrade Details

Version	Contents
1.10	In the version 1.00, the unit has been changed right after the "Unit No. (UnitNo)" was changed. In the version 1.10, a unit can be changed only when turning ON the "Connect (Connection)".
	In the version 1.00, comparing between the status commanded by "Normal (OK)" and the real status was stopped. In the version 1.10, the comparison between the status commanded by "Normal (OK)" and the real status is returned even when the unit error occurs.

■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.