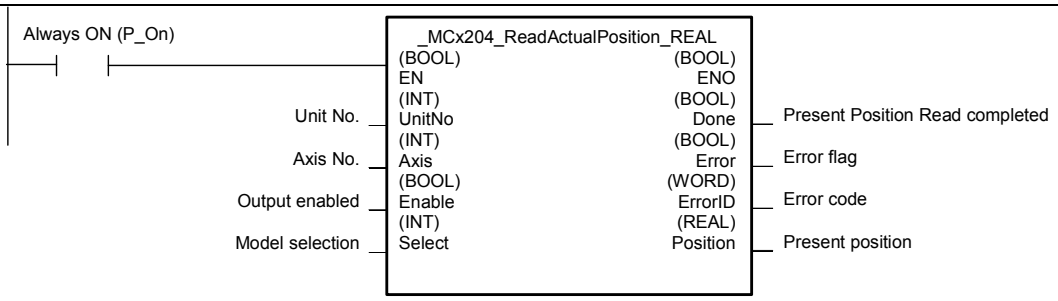
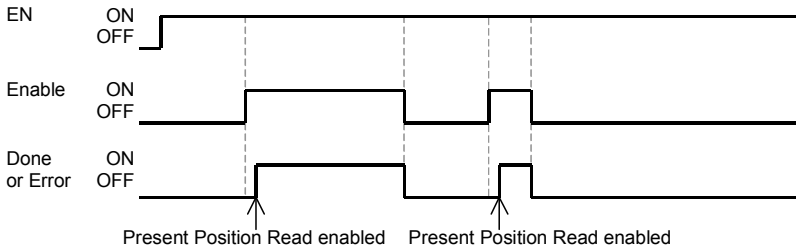
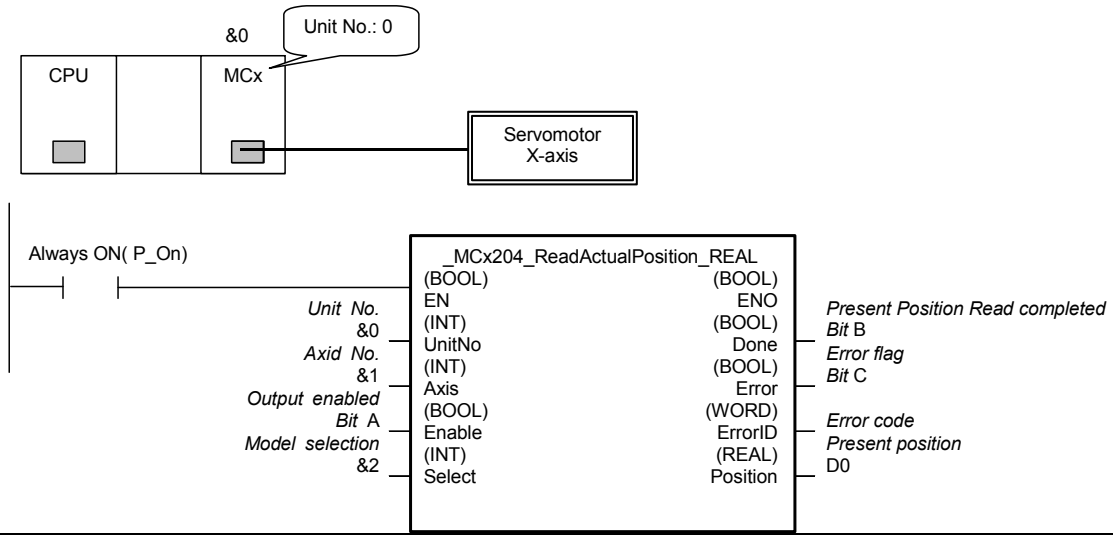
MCx 204	Read Present Position(REAL): _MCx204_ReadActualPosition_REAL

Basic function	Reads the present position of an axis.	
Symbol		
File name	Lib\FBL\omronlib\ PositionController \MCx_MCx204_ReadActualPosition_REAL10.cxf	
Applicable models	Motion Control Unit	CS1W-MC221(-V1)/421(-V1)
	CPU Unit	CS1*-CPU**H Unit version 3.0 or higher CJ1*-CPU**H Unit version 3.0 or higher CJ1M-CPU** Unit version 3.0 or higher CP1H
	CX-Programmer	Version 5.0 or higher
Conditions for usage	None	
Function description	While Output enabled (Enable) is ON, the present position of the axis specified with Unit No. (UnitNo) and Axis No. (Axis) is cyclically read and output. Turning OFF Output enabled (Enable) will clear the present position to 0. Present Position Read completed (Done) turns ON while the enable present position is read and output. The Error Flag (Error) will be turned ON and the Error Code (Error code) will be output if an error occurs for this FB. Strictly speaking, they are respectively turned ON or output only when Unit No. (UnitNo) or Axis No. (Axis) is set out of range. Turning OFF Output enabled (Enable) will reset the status. 	
FB precautions		
EN input condition	• Connect the EN input to the Always On Flag (P_On). • If a different type of bit is connected to EN, the FB outputs will be maintained when the connected bit is turned OFF.	
Restriction Other		

Application example	When the Bit A turns ON, the present position of the Servomotor (X-axis) connected to the Motion Control Unit of the Unit No. 0 is read and stored in D0. 
Related manuals	CS1W-MC221(-V1)/421(-V1) Motion Control Units Operation Manual (W359)

■ **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 to &93 &0 to &91	Depends on the model of Motion Control Units. &0 to &95 (MC221) &0 to &91 (MC421)
Axis No.	Axis	INT	&1	&1 to &4	&1: X-axis &2: Y-axis &3: Z-axis &4: U-axis
Output enabled	Enable	BOOL	0(OFF)		1 (ON): Output enabled 0 (OFF): Output reset
Model selection	Select	INT	&4	&2, &4	&2: 2-axis Unit (MC221) &4: 4-axis Unit (MC421)

Output Variables

Name	Variable name	Data type	Range	Description
ENO	ENO	BOOL		1 (ON): FB operating normally 0 (OFF): FB not operating normally/FB ended with error
Present Position Read completed	Done	BOOL		This turns ON when Axis Error Read is completed normally.
Error flag	Error	BOOL		This turns ON when Axis Error Read is ended with an error.
Error code	ErrorID	WORD		The error code of the error occurred in the FB will be output. For details of the errors, refer to the manual listed in the Related manuals above. When Unit No. or Axis No. is out of the range or when a bit to be used for this FB is already ON, #0000 will be output.
Present position	Position	REAL		Feedback present position of each axis controlled by the Motion Control Unit is read and output.

Version History

Version	Date	Contents
1.00	2005.4	Original production

Note

This manual is a reference that explains the function block functions.
It does not explain the operational limitations of Units, components, or combinations of Units and components. Always read and understand the Operation Manuals for the system's Units and other components before using them.