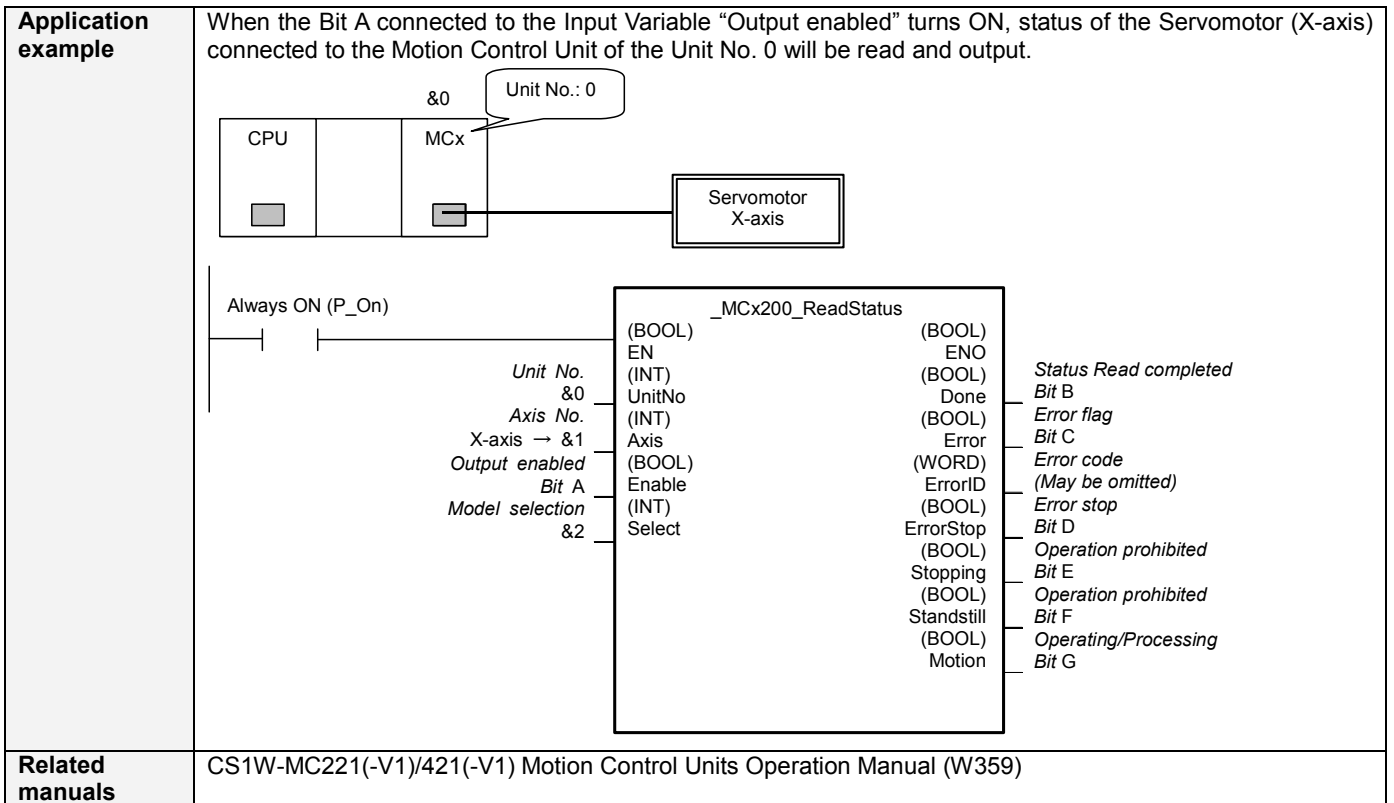


MCx 200	Read Status: _MCx200_ReadStatus
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Basic function	Reads the status of an axis.																	
Symbol	<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>Always ON (P_On)</p> </div> <div style="border: 1px solid black; padding: 5px; margin-right: 20px;"> <p style="text-align: center;">_MCx200_ReadStatus</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 2px;">(BOOL) EN</td> <td style="width: 50%; padding: 2px;">(BOOL) ENO</td> </tr> <tr> <td style="padding: 2px;">(INT) UnitNo</td> <td style="padding: 2px;">(BOOL) Done</td> </tr> <tr> <td style="padding: 2px;">(INT) Axis</td> <td style="padding: 2px;">(BOOL) Error</td> </tr> <tr> <td style="padding: 2px;">(BOOL) Enable</td> <td style="padding: 2px;">(WORD) ErrorID</td> </tr> <tr> <td style="padding: 2px;">(INT) Select</td> <td style="padding: 2px;">(BOOL) ErrorStop</td> </tr> <tr> <td></td> <td style="padding: 2px;">(BOOL) Stopping</td> </tr> <tr> <td></td> <td style="padding: 2px;">(BOOL) Standstill</td> </tr> <tr> <td></td> <td style="padding: 2px;">(BOOL) Motion</td> </tr> </table> </div> <div style="margin-left: 20px;"> <p>Unit No. — Status Read completed</p> <p>X-axis No. — Error flag</p> <p>Output enabled — Error code</p> <p>Model selection — Error stop</p> <p>— Operation prohibited</p> <p>— Waiting for start</p> <p>— Operating/Processing</p> </div> </div>		(BOOL) EN	(BOOL) ENO	(INT) UnitNo	(BOOL) Done	(INT) Axis	(BOOL) Error	(BOOL) Enable	(WORD) ErrorID	(INT) Select	(BOOL) ErrorStop		(BOOL) Stopping		(BOOL) Standstill		(BOOL) Motion
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(INT) Select	(BOOL) ErrorStop																	
	(BOOL) Stopping																	
	(BOOL) Standstill																	
	(BOOL) Motion																	
File name	Lib\FBL\omronlib\ PositionController \MCx\ _MCx200_ReadStatus10.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	<p>While Output enabled (Enable) is ON, status of the axis specified with Unit No. (UnitNo) and Axis No. (Axis) is cyclically read and output. When Output enabled (Enable) turns OFF, status will be reset.</p> <p>The Status Read completed (Done) turns ON when valid status is being read and output.</p> <p>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.</p> <p>These statuses will be reset when Output enabled (Enable) turns OFF.</p> <p>They are output by this FB, combining the states of the Status Bits in the Bit Area of the applicable Motion Control Unit. See the table below.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 20%;">Output Variable</th> <th style="width: 40%;">Status</th> <th style="width: 40%;">Output condition</th> </tr> </thead> <tbody> <tr> <td>ErrorStop</td> <td>Being stopped by an error</td> <td>Task Error (Task Status Bit) or Alarm Flag (Axis Status Bit) is ON.</td> </tr> <tr> <td>Stopping</td> <td>Stopped after a deceleration stop and operation prohibited (Enabled only in Manual Mode)</td> <td> <ul style="list-style-type: none"> •Deceleration Stop (Axis Control Bit) is ON. •In Manual Mode (Task Status Bit) is ON. •Task Error (Task Status Bit) is OFF. •Alarm Flag (Axis Status Bit) is OFF. </td> </tr> <tr> <td>StandStill</td> <td>Waiting for start command in Manual Mode</td> <td> <ul style="list-style-type: none"> •Deceleration Stop (Axis Control Bit) is OFF. •In Manual Mode (Task Status Bit) is ON. •Task Error (Task Status Bit) is OFF. •Alarm Flag (Axis Status Bit) is OFF. •Busy Flag (Axis Status Bit) is OFF. </td> </tr> <tr> <td>Motion</td> <td>Operation in progress, processing command, or in Automatic Mode</td> <td> <ul style="list-style-type: none"> •Task Error (Task Status Bit) is OFF. •Alarm flag (Axis Status Bit) is OFF •Either of Axis Operating (Axis Status Bit) or In Automatic Mode (Task Status Bit) is ON. </td> </tr> </tbody> </table>		Output Variable	Status	Output condition	ErrorStop	Being stopped by an error	Task Error (Task Status Bit) or Alarm Flag (Axis Status Bit) is ON.	Stopping	Stopped after a deceleration stop and operation prohibited (Enabled only in Manual Mode)	<ul style="list-style-type: none"> •Deceleration Stop (Axis Control Bit) is ON. •In Manual Mode (Task Status Bit) is ON. •Task Error (Task Status Bit) is OFF. •Alarm Flag (Axis Status Bit) is OFF. 	StandStill	Waiting for start command in Manual Mode	<ul style="list-style-type: none"> •Deceleration Stop (Axis Control Bit) is OFF. •In Manual Mode (Task Status Bit) is ON. •Task Error (Task Status Bit) is OFF. •Alarm Flag (Axis Status Bit) is OFF. •Busy Flag (Axis Status Bit) is OFF. 	Motion	Operation in progress, processing command, or in Automatic Mode	<ul style="list-style-type: none"> •Task Error (Task Status Bit) is OFF. •Alarm flag (Axis Status Bit) is OFF •Either of Axis Operating (Axis Status Bit) or In Automatic Mode (Task Status Bit) is ON. 	
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FB precautions																		
EN input condition	<ul style="list-style-type: none"> • 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. 																	
Restrictions Other	<ul style="list-style-type: none"> • This FB uses bits in the Bit Areas of the applicable Motion Control Units listed above. Do not use these bits as Output Bits connected directly to the right bus bar in the ladder programs. <p>Note For bit address calculation, these bits are read inside the FB when executing each instance for the first time, or when the Input Variables Unit No. (UnitNo), Axis No. (Axis), and Model selection (Select) are changed and then Start (Execute) is turned ON.</p>																	



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)		0 (OFF): Output reset 1 (ON): Output enabled
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 not started •One or more Input Variables set out of range •FB ended with an error •Parameter not read successfully
Status Read completed	Done	BOOL		1 (ON) indicates that valid status is being read and output.
Error flag	Error	BOOL		1 (ON) indicates that an error has occurred in the FB.
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, #0000 will be output.
Error stop	ErrorStop	BOOL		1 (ON) indicates that the operation is being stopped with an error.
Operation prohibited	Stopping	BOOL		1 (ON) indicates that the axis is decelerating in Manual Mode or that operations are prohibited.
Waiting for start	Standstill	BOOL		1 (ON) indicates that the Motion Control Unit is waiting for a start command in Manual Mode.
Operating/ Processing	Motion	BOOL		1 (ON) indicates that the axis is operating or that the Motion Control Unit is in Automatic Mode.

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.