MCx 070	Operation Command: _MCx070_Power

Basic function	Turns the main power circuit ON and OFF.
Symbol	Always ON (P_On) Unit No. — UnitNo Axis No. — Axis Servo Lock Bit — Enable Model selection — Select _MCx070_Power (BOOL) EN → ENO (BOOL) (INT) UnitNo → Status (BOOL) — Servo status flag (INT) Axis → OK (BOOL) — Normal (BOOL) Enable → Error (BOOL) — Error flag (INT) Select → ErrorID (WORD) — Error code
File name	Lib\FBL\omronlib\ PositionController \MCx_MCx070_Power10.cxf
Applicable models	Motion Control Unit
	CPU Unit
	CX-Programmer
Conditions for usage	None
Function description	
FB precautions	
EN input condition	
Restrictions Other	

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

Function description

When Servo Lock Bit (Enable) turns ON, Servo Lock will be executed on the axis specified with Unit No. (UnitNo) and Axis No. (Axis). When Servo Lock Bit (Enable) turns OFF, Servo Unlock will be executed. For details, refer to the manuals listed in Related manuals below.

The Servo status flag (Status) will turn ON when the Servo Lock command by this FB is completely received.
The Error Flag (Error) will be turned ON and the Error Code (Error code) will be output if an error occurs for this FB. These statuses are not output for errors of other FBs or instances.
These statuses will be reset when Servo Lock Bit (Enable) turns OFF. If Servo Lock Bit (Enable) turns OFF before completion of the Servo Lock, the status will be set for at least one cycle when a corresponding condition occurs.

EN   ON/OFF
ENO   ON/OFF
Enable   ON/OFF
Status   ON/OFF
OK or Error   ON/OFF

FB precautions

• Servo Lock Bit (Enable) can be used in Manual Mode. It cannot be executed when Servo Lock Bit (Enable) turns ON in Automatic Mode.
• Servo Unlock can be used in both Manual and Automatic Mode.
• For details, refer to the manuals listed in Related manuals below.

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.

Restrictions Other

• 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.

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.

Application example	Servo Lock is executed on the Servomotor (X-axis) connected to the Motion Control Unit of the Unit No. 0.

Related manuals	CS1W-MC221(-V1)/421(-V1) Motion Control Units Operation Manual (W359)
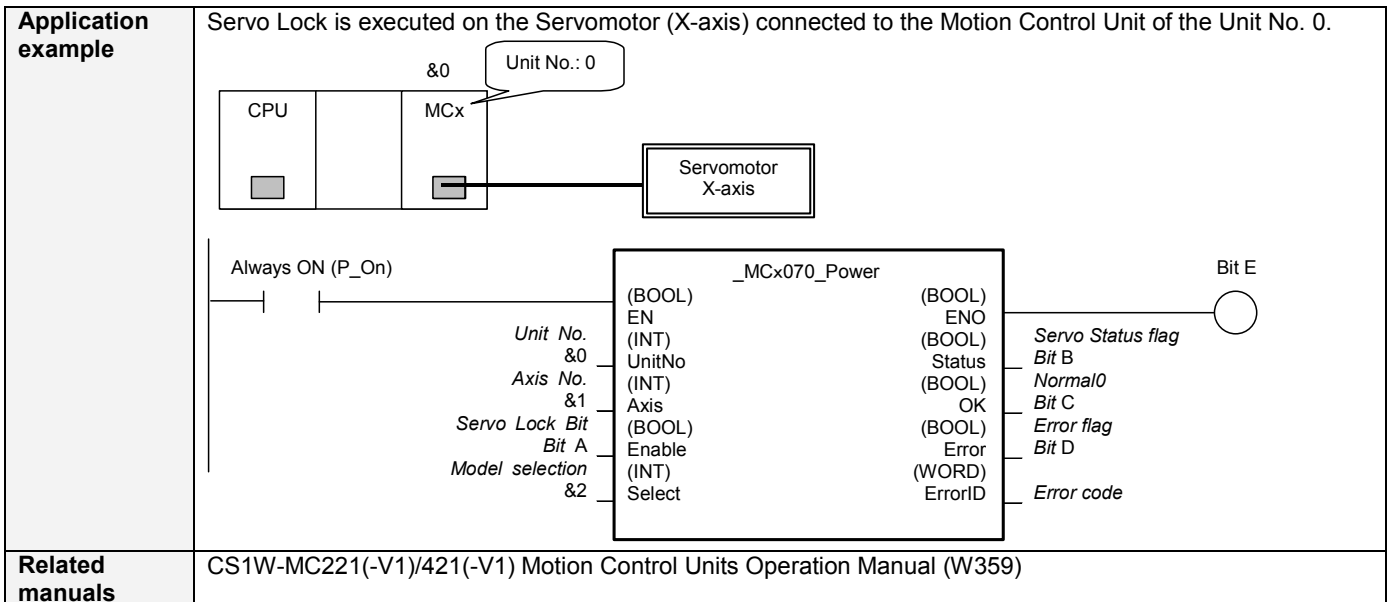
■ **Variable Tables**
Input Variables

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
Servo Lock Bit	Enable	BOOL	0(OFF)		↑:Starts Servo Lock ↓:Srart Servo Unock
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
Servo status flag	Status	BOOL		1 (ON): In Servo Lock state 0 (OFF): In Servo Unlock state
Normal	OK	BOOL		1 (ON) indicates that the states of Servo Lock Bit (Enable) and Servo status flag (Status) match with each other.
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.

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.