MITSUBISHI ELECTRIC

Programmable Controller

MELSEC iQ-R series

MELSEC iQ-R Positioning Module Function Block Reference

CONTENTS

1 FUNCTION BLOCK (FB) LIST

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M+RD75_StartPositioning	Starts the positioning operation.
M+RD75_JOG	Performs the JOG operation or inching operation.
M+RD75_MPG	Performs the manual pulse generator operation.
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M+RD75_ChangeAccDecTime	Changes the acceleration/deceleration time at the speed change.
M+RD75_ChangePosition	Changes the target position.
M+RD75_Restart	Restarts the axis being stopped.
M+RD75_OperateError	Monitors errors and warnings, and resets errors.
M+RD75_InitializeParameter	Initializes parameters.
M+RD75_WriteFlash	Writes positioning data and block start data in the buffer memory to the flash ROM.
M+RD75_ABRST	Restores the absolute position.
M+RD75_StartAddressOffsetPositioning	Starts one of the axes after the other axis has started and moved for a specified movement amount.
M+RD75_SetTimeOffsetPositioning	Starts one of the axes after the other axis has started and a specified time has elapsed.

*1 Note that this reference does not describe the FB version information which is displayed such as "_00A" at the end of FB name

MEMO

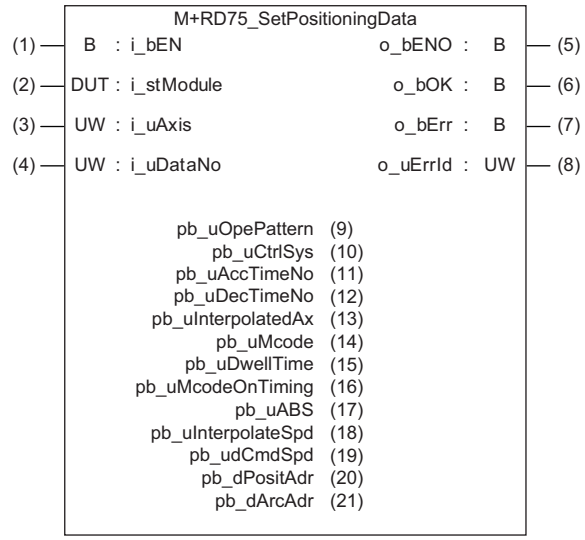
2 POSITIONING MODULE FB

2.1 M+RD75_SetPositioningData

Name

M+RD75_SetPositioningData

Overview

Item	Description
Overview	Sets positioning data (Da.1 to Da.10, Da.27 to Da.29).
Symbol	

Labels

■Input label

No.	Variable name	Name	Data type	Range	Description
(1)	i_bEN	Execution command	Bit	On or off	On: The FB is activated. Off: The FB is not activated.
(2)	i_stModule	Module label	Structure	The setting range differs depending on the module label.	Specify the module label of the MELSEC iQ-R positioning module.
(3)	i_uAxis	Target axis	Word [unsigned]	1 to 4	Specify the axis number.
(4)	i_uDataNo	Positioning data No.	Word [unsigned]	1 to 600	Specify the positioning data No.

■Output label

No.	Variable name	Name	Data type	Default value	Description
(5)	o_bENO	Execution status	Bit	Off	On: The execution command is on. Off: The execution command is off.
(6)	o_bOK	Normal completion	Bit	Off	When this label is on, it indicates that the positioning data setting has been completed.
(7)	o_bErr	Error completion	Bit	Off	When this label is on, it indicates that an error has occurred in the FB.
(8)	o_uErrId	Error code	Word [unsigned]	0	Stores the abnormal code generated in the FB.

■Public variable

No.	Variable name	Name	Data type	Range	Description
(9)	pb_uOpePattern	Da.1: Operation pattern	Word [unsigned]	0: Positioning complete 1: Continuous positioning control 3: Continuous path control	Set whether the positioning is complete with a specified data or continues using the following data. When 4 or higher, which is out of the setting range, is specified, bit 0 and 1 are enabled. For example, when 4 is set, 0 is applied.

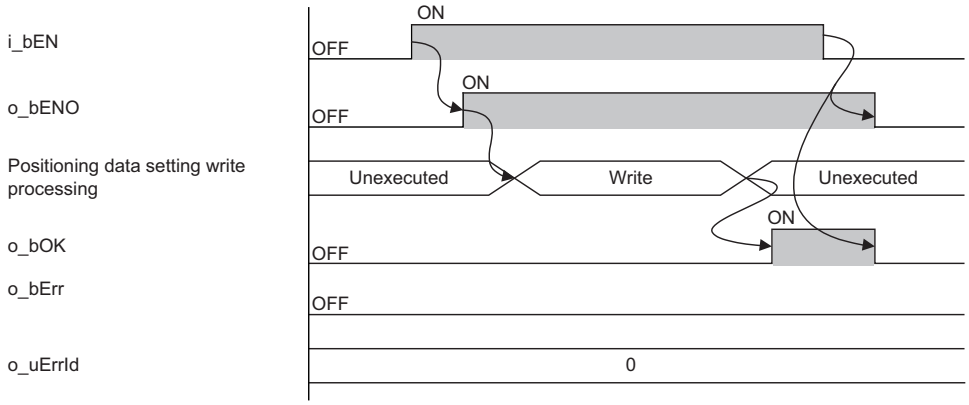
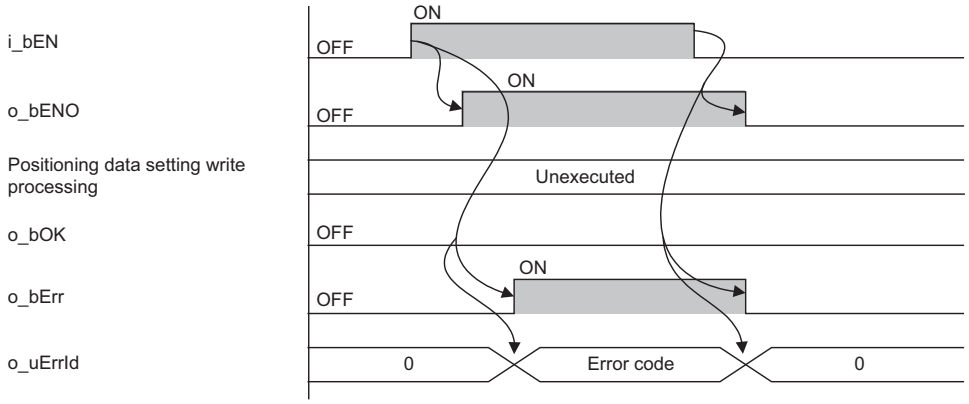
No.	Variable name	Name	Data type	Range	Description
(10)	pb_uCtrlSys	Da.2: Control method	Word [unsigned]	01H: ABS1 1-axis linear control (ABS) 02H: INC1 1-axis linear control (INC) 03H: FEED1 1-axis fixed-feed control 04H: VF1 1-axis speed control (forward run) 05H: VR1 1-axis speed control (reverse run) 06H: VPF Speed-position switching control (forward run) 07H: VPR Speed-position switching control (reverse run) 08H: PVF Position-speed switching control (forward run) 09H: PVR Position-speed switching control (reverse run) 0AH: ABS2 2-axis linear interpolation control (ABS) 0BH: INC2 2-axis linear interpolation control (INC) 0CH: FEED2 Fixed-feed control by 2-axis linear interpolation 0DH: ABS⌒ Circular interpolation control with sub point specified (ABS) 0EH: INC⌒ Circular interpolation control with sub point specified (INC) 0FH: ABS. Circular interpolation control with center point specified (ABS, CW) 10H: ABS. Circular interpolation control with center point specified (ABS, CCW) 11H: INC. Circular interpolation control with center point specified (INC, CW) 12H: INC. Circular interpolation control with center point specified (INC, CCW) 13H: VF2 2-axis speed control (forward run) 14H: VR2 2-axis speed control (reverse run) 15H: ABS3 3-axis linear interpolation control (ABS) 16H: INC3 3-axis linear interpolation control (INC) 17H: FEED3 Fixed-feed control by 3-axis linear interpolation 18H: VF3 3-axis speed control (forward run) 19H: VR3 3-axis speed control (reverse run) 20H: ABSH⌒ Helical interpolation control with sub point specified (ABS) 21H: INCH⌒ Helical interpolation control with sub point specified (INC) 22H: ABSH. Helical interpolation control with center point specified (ABS, CW) 23H: ABSH. Helical interpolation control with center point specified (ABS, CCW) 24H: INCH. Helical interpolation control with center point specified (INC, CW) 25H: INCH. Helical interpolation control with center point specified (INC, CCW) 1AH: ABS4 4-axis linear interpolation control (ABS) 1BH: INC4 4-axis linear interpolation control (INC) 1CH: FEED4 Fixed-feed control by 4-axis linear interpolation 1DH: VF4 4-axis speed control (forward run) 1EH: VR4 4-axis speed control (reverse run) 80H: NOP NOP instruction 81H: POS Current value change 82H: JUMP JUMP instruction 83H: LOOP Beginning of LOOP-to-LEND processing 84H: LEND End of LOOP-to-LEND processing	Set the control method for performing the positioning control.
(11)	pb_uAccTimeNo	Da.3: Acceleration time No.	Word [unsigned]	0: Acceleration time 0 1: Acceleration time 1 2: Acceleration time 2 3: Acceleration time 3	Set which of Acceleration time (0, 1, 2, or 3) is to be used for the acceleration time during positioning. When 4 or higher, which is out of the setting range, is specified, bit 0 and 1 are enabled. For example, when 4 is set, 0 is applied.

No.	Variable name	Name	Data type	Range	Description
(12)	pb_uDecTimeNo	Da.4: Deceleration time No.	Word [unsigned]	0: Deceleration time 0 1: Deceleration time 1 2: Deceleration time 2 3: Deceleration time 3	Set which of Deceleration time (0, 1, 2, or 3) is to be used for the deceleration time during positioning. When 4 or higher, which is out of the setting range, is specified, bit 0 and 1 are enabled. For example, when 4 is set, 0 is applied.
(13)	pb_uInterpolatedAx	Da.5: Axis to be interpolated	Word [unsigned]	0: Axis 1 specification 1: Axis 2 specification 2: Axis 3 specification 3: Axis 4 specification	Set the axis to be interpolated for performing the 2-axis interpolation operation. Values out of the setting range or the self-axis cannot be set as the axis to be interpolated. Set 0 to perform the control without interpolation, the 3-axis interpolation control, or 4-axis interpolation control.
(14)	pb_uMcode	Da.10: M code	Word [unsigned]	Da.2: Control method = 82H: JUMP instruction • 0 to 10 Da.2: Control method = 83H: LOOP • 1 to 65,535 Da.2: Control method = 20H to 25H: Helical interpolation • 0 to 999 Da.2: Control method = Other than the above • 0 to 65,535	Set the condition data No., number of repetitions, or M code for the selected control method.
(15)	pb_uDwellTime	Da.9: Dwell time	Word [unsigned]	Da.2: Control method = 82H: JUMP instruction • 1 to 600 Da.2: Control method = 82H: Other than JUMP instruction • 0 to 65,535	Set the positioning data No. or dwell time for the selected control method.
(16)	pb_uMcodeOnTiming	Da.27: M code ON signal output timing	Word [unsigned]	0: Setting value of Pr.18 M code ON signal output timing 1: WITH mode 2: AFTER mode	Set the timing of outputting the M code ON signal. When 4 or higher is set, bit 0 and 1 are enabled. For example, when 4 is set, 0 is applied.
(17)	pb_uABS	Da.28: ABS direction in degrees	Word [unsigned]	0: Setting value of Cd.40 ABS direction in degrees 1: ABS clockwise 2: ABS counterclockwise 3: Shortcut (the direction setting is invalid)	Set the ABS movement direction for the position control when the unit is degree. When 4 or higher, which is out of the setting range, is specified, bit 0 and 1 are enabled. For example, when 4 is set, 0 is applied.
(18)	pb_uInterpolateSpd	Da.29: Interpolation speed specification method	Word [unsigned]	0: Setting value of Pr.20 Interpolation speed specification method 1: Composite speed 2: Reference axis speed	When performing linear interpolation/circular interpolation, set which speed (the composite speed or the speed of the reference axis) is to be used. When 8 or higher is set, bit 0, 1, and 2 are enabled. For example, when 8 is set, 0 is applied.

No.	Variable name	Name	Data type	Range	Description
(19)	pb_udCmdSpd	Da.8: Command speed	Double Word [unsigned]	Pr.1: Unit setting = 0, 1 • 1 to 2,000,000,000 Pr.1: Unit setting = 2 • 1 to 3,000,000,000 Pr.1: Unit setting = 3 • 1 to 5,000,000	Set the command speed for positioning.
				FFFFFFFFH: Current speed (Speed set for the previous positioning data No.)	The speed set for the previous positioning data No. is used for the positioning control.
(20)	pb_dPositAdr	Da.6: Positioning address	Double word [signed]	Pr.1: Unit setting = 0, 1, 3 • Da.2: Control method = 06H to 09H: 0 to 2147483647 • Da.2: Control method = Other than 06H to 09H: -2147483648 to 2147483647 Pr.1: Unit setting = 2 • Da.2: Control method = 01H, 0AH, 15H, 1AH, 81H, 20H, 22H, 23H: 0 to 35,999,999 • Da.2: Control method = 02H, 0BH, 16H, 1BH, 03H, 0CH, 17H, 1CH, 20H, 22H, 23H: -2,147,483,648 to 2,147,483,647 • Da.2: Control method = 06H, 07H: 0 to 2147483647 (INC mode), 0 to 35999999 (ABS mode) • Da.2: Control method = 08H, 09H: 0 to 2147483647	Specify the target position or movement amount for the positioning control. The setting range differs depending on the control method.
(21)	pb_dArcAdr	Da.7: Arc address	Double word [signed]	Pr.1: Unit setting = 0, 1, 3 • -2,147,483,648 to 2,147,483,647 Pr.1: Unit setting = 2 • Not used (Set 0.)	Use this variable only when performing the circular interpolation control. For the control with sub point specified, set the sub point address. For the control with center point specified, set the center point address of the arc.

FB details

Item	Description	
Available device	Target module	RD75P2, RD75P4, RD75D2, RD75D4
	CPU module	MELSEC iQ-R series CPU modules
	Engineering tool	GX Works3
Language	Ladder diagram	
Number of basic steps	174 steps The number of steps of the FB embedded in a program depends on the CPU module used, the input/output definitions, and the options setting of GX Works3. For the options setting of GX Works3, refer to the GX Works3 Operating Manual.	
Processing	• By turning on i_bEN (Execution command), the set positioning data is written to the buffer memory. • If the setting value of the target axis is out of the setting range, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 100 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes. • If the setting value of the positioning data No. is out of the setting range, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 101 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes. • When setting or monitoring public variables, specify them in the form of "FB instance" or "public variable". The following figure shows a program example to set 0 (Positioning complete) for pb_uOpePattern (Da.1: Operation pattern) of the public variable. 	
FB compilation method	Macro type	
FB operation	Pulsed execution (single scan execution type)	

Item	Description
Timing chart of I/O signals	■When the operation is completed successfully  ■When the operation is completed with an error 
Restrictions or precautions	• This FB does not include the error recovery processing. Program the error recovery processing separately in accordance with the required system operation. • This FB cannot be used in an interrupt program. • Do not use this FB in programs that are executed only once, such as a subroutine program or FOR-NEXT loop, because i_bEN (Execution command) cannot be turned off and the normal operation cannot be acquired. Always use this FB in programs that can turn off i_bEN (Execution command). • When this FB is used twice or more, precaution must be taken to avoid duplication of the target axis. • This FB requires the configuration of the ladder for every input label. • To operate the RD75, the logics of the pulse output mode and external I/O signals are required to be set according to each device and system connected. Set the module parameter of GX Works3 according to the application. For the setting method of the module parameter, refer to MELSEC iQ-R Positioning Module User's Manual (Application).

Error code

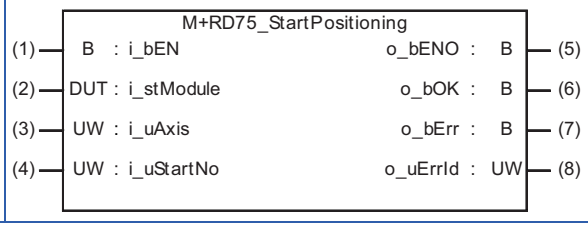
Error code	Description	Action
100H	The set value of i_uAxis (Target axis) is out of the range. The target axis is not within the range of 1 to 4.	Try again after checking the setting.
101H	The set value of i_uDataNo (Positioning data No.) is out of the range. The positioning data No. is not within the range of 1 to 600.	Try again after checking the setting.

2.2 M+RD75_StartPositioning

Name

M+RD75_StartPositioning

Overview

Item	Description
Overview	Starts the positioning operation.
Symbol	

Labels

■Input label

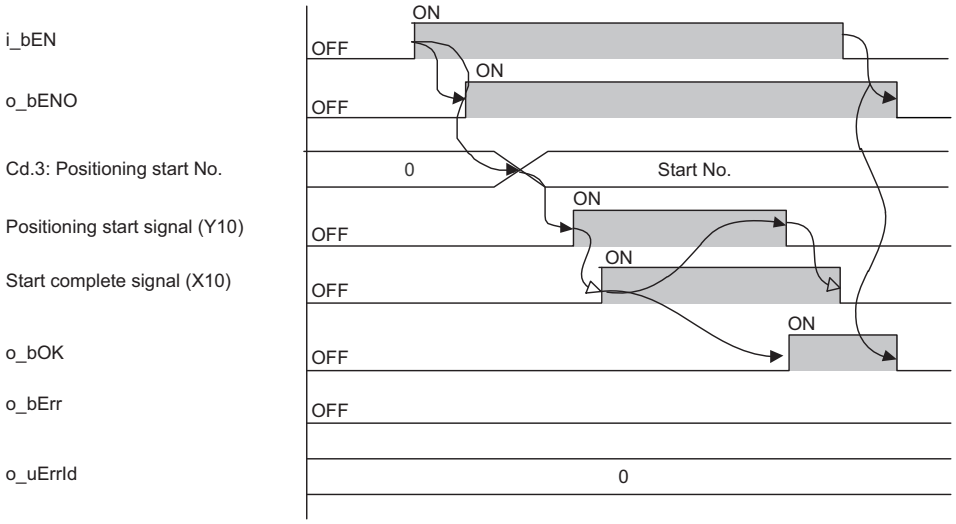
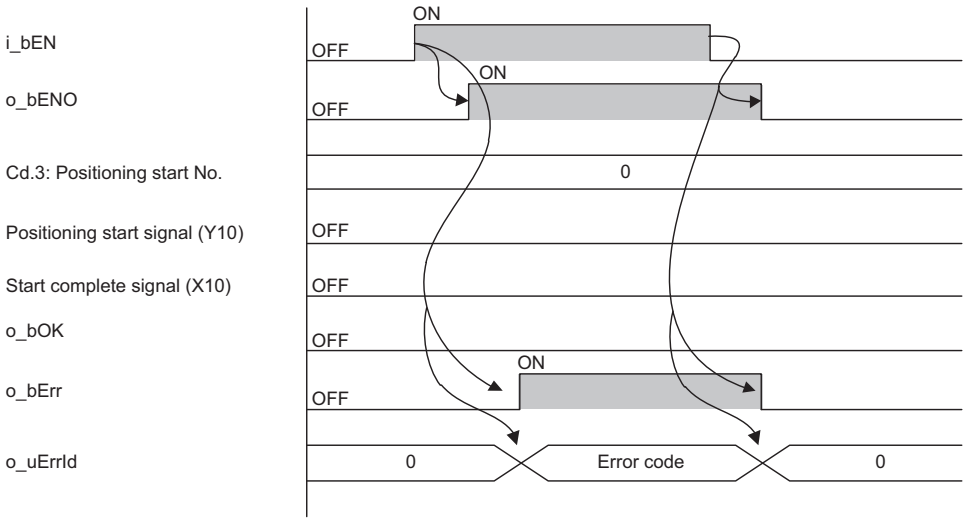
No.	Variable name	Name	Data type	Range	Description
(1)	i_bEN	Execution command	Bit	On or off	On: The FB is activated. Off: The FB is not activated.
(2)	i_stModule	Module label	Structure	The setting range differs depending on the module label.	Specify the module label of the MELSEC iQ-R positioning module.
(3)	i_uAxis	Target axis	Word [unsigned]	1 to 4	Specify the axis number.
(4)	i_uStartNo	Cd.3: Positioning start No.	Word [unsigned]	1 to 600: Positioning data No. 7000 to 7004: Block start specification 9001: Machine OPR 9002: Fast OPR 9003: Current value change 9004: Multiple axes simultaneous start	Set the positioning start No. corresponding to the control to be started in Cd.3: Positioning start No.

■Output label

No.	Variable name	Name	Data type	Default value	Description
(5)	o_bENO	Execution status	Bit	Off	On: The execution command is on. Off: The execution command is off.
(6)	o_bOK	Normal completion	Bit	Off	When this label is on, it indicates that the positioning operation has been completed. However, this label does not turn on if a module error occurs at the start.
(7)	o_bErr	Error completion	Bit	Off	When this label is on, it indicates that an error has occurred in the FB.
(8)	o_uErrId	Error code	Word [unsigned]	0	Stores the abnormal code generated in the FB.

FB details

Item	Description	
Available device	Target module	RD75P2, RD75P4, RD75D2, RD75D4
	CPU module	MELSEC iQ-R series CPU modules
	Engineering tool	GX Works3
Language	Ladder diagram	

Item	Description
Number of basic steps	407 steps The number of steps of the FB embedded in a program depends on the CPU module used, the input/output definitions, and the options setting of GX Works3. For the options setting of GX Works3, refer to the GX Works3 Operating Manual.
Processing	• By turning on i_bEN (Execution command), the control corresponding to i_uStartNo (Cd.3: Positioning start No.) is started. • This FB is activated by turning on Positioning start signal (Y10, Y11, Y12, Y13). • Only when the following conditions are satisfied, Positioning start signal (Y10, Y11, Y12, Y13) is turned on by turning on i_bEN (Execution command). If any of the conditions is not satisfied, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 200 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes. (The conditions are the following: RD75 READY (X0) is on, Positioning start signal (Y10, Y11, Y12, Y13) is off, Start complete signal (X10, X11, X12, X13) is off, BUSY signal (XC, XD, XE, XF) is off.) • When Start complete signal (X10, X11, X12, X13) turns on or i_bEN (Execution command) is turned off, Positioning start signal (Y10, Y11, Y12, Y13) is turned off. • If the setting value of the target axis is out of the setting range, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 100 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes. • If the setting value of the positioning start No. is out of the setting range, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 102 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes.
FB compilation method	Macro type
FB operation	Pulse execution (multiple scan execution type)
Timing chart of I/O signals	■When the operation is completed successfully (Axis 1)  ■When the operation is completed with an error (Axis 1) 

Item	Description
Restrictions or precautions	• This FB does not include the error recovery processing. Program the error recovery processing separately in accordance with the required system operation. • This FB cannot be used in an interrupt program. • Do not use this FB in programs that are executed only once, such as a subroutine program or FOR-NEXT loop, because i_bEN (Execution command) cannot be turned off and the normal operation cannot be acquired. Always use this FB in programs that can turn off i_bEN (Execution command). • This FB turns on and off Positioning start signal (Y10, Y11, Y12, Y13). Thus, do not turn on and off Positioning start signal (Y10, Y11, Y12, Y13) by other means while this FB is being executed. • When this FB is used twice or more, or when other FB that operates the Y signal same as the signal this FB does, create an interlock to prevent the FBs from being activated at the same time. • When this FB is used twice or more, precaution must be taken to avoid duplication of the target axis. • When this FB is used in two or more places, a duplicated coil warning may occur during compile operation due to the Y signal being operated by the module label. However, this is not a problem and the FB will operate without an error. • This FB does not set the data when started. Data required for controlling the start No. must be set on the parameter or buffer memory. • This FB requires the configuration of the ladder for every input label. • To operate the RD75, the logics of the pulse output mode and external I/O signals are required to be set according to each device and system connected. Set the module parameter of GX Works3 according to the application. For the setting method of the module parameter, refer to MELSEC iQ-R Positioning Module User's Manual (Application).

Error code

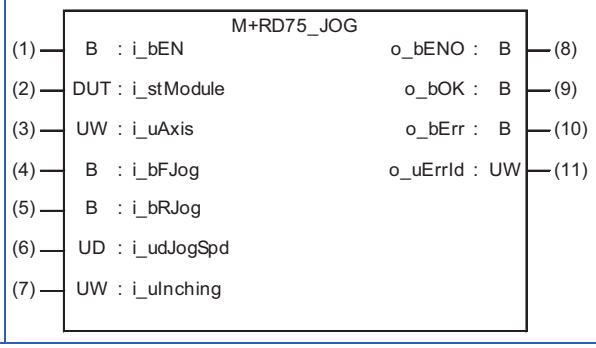
Error code	Description	Action
100H	The set value of i_uAxis (Target axis) is out of the range. The target axis is not within the range of 1 to 4.	Try again after checking the setting.
102H	The set value of i_uStartNo (Cd.3: Positioning start No.) is out of the range. The positioning start No. is not within the range of 1 to 600, 7000 to 7004, and 9001 to 9004.	Try again after checking the setting.
200H	The conditions for positioning start are not satisfied. Any of the following conditions is not satisfied. • RD75 READY: On • Positioning start signal: Off • Start complete signal: Off • BUSY signal: Off	Execute the FB again when all of the following conditions are satisfied. • RD75 READY: On • Positioning start signal: Off • Start complete signal: Off • BUSY signal: Off

2.3 M+RD75_JOG

Name

M+RD75_JOG

Overview

Item	Description
Overview	Performs the JOG operation or inching operation.
Symbol	

Labels

■Input label

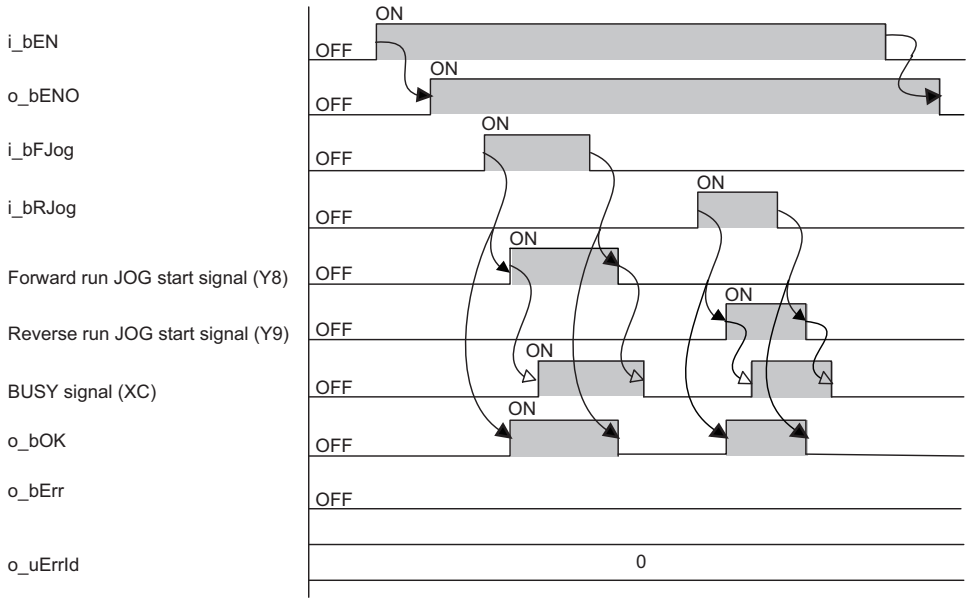
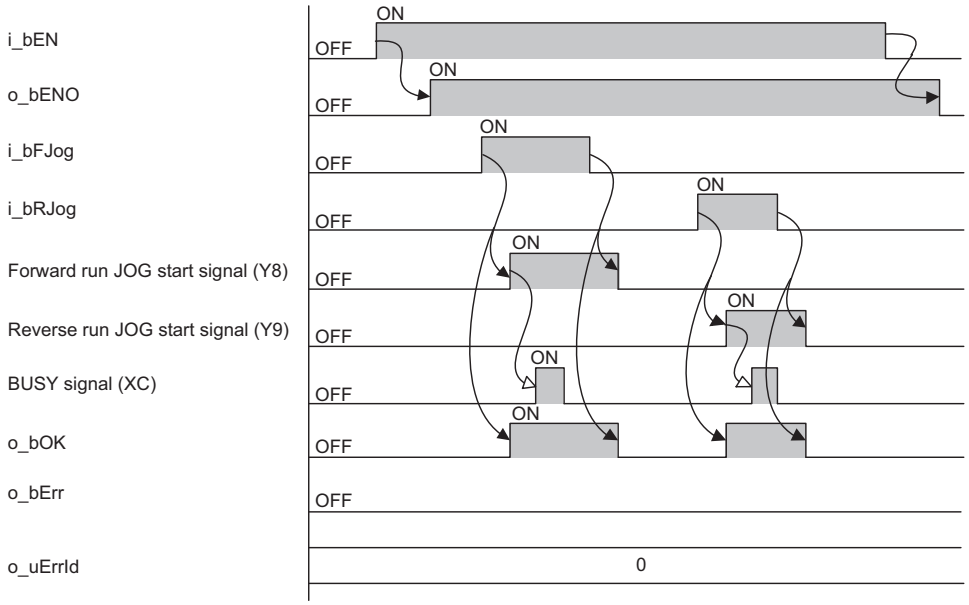
No.	Variable name	Name	Data type	Range	Description
(1)	i_bEN	Execution command	Bit	On or off	On: The FB is activated. Off: The FB is not activated.
(2)	i_stModule	Module label	Structure	The setting range differs depending on the module label.	Specify the module label of the MELSEC iQ-R positioning module.
(3)	i_uAxis	Target axis	Word [unsigned]	1 to 4	Specify the axis number.
(4)	i_bFJog	Forward run JOG command	Bit	On or off	Turn on this label to perform the forward run JOG operation or forward inching operation.
(5)	i_bRJog	Reverse run JOG command	Bit	On or off	Turn on this label to perform the reverse run JOG operation or reverse inching operation.
(6)	i_udJogSpd	Cd.17: JOG speed	Double Word [unsigned]	Pr.1: Unit setting = 0, 1 • 1 to 2,000,000,000 Pr.1: Unit setting = 2 • 1 to 3,000,000,000 Pr.1: Unit setting = 3 • 1 to 5,000,000	Specify the JOG speed. Set 0 for the inching operation.
(7)	i_uInching	Cd.16: Inching movement amount	Word [unsigned]	0 to 65,535 0: JOG operation	Specify the inching movement amount. Set 0 for the JOG operation.

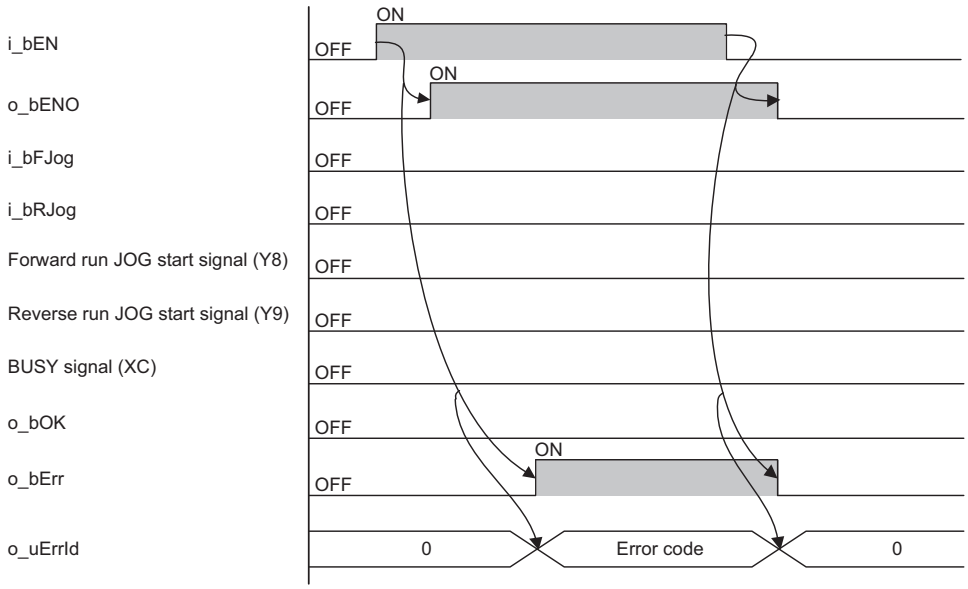
■Output label

No.	Variable name	Name	Data type	Default value	Description
(8)	o_bENO	Execution status	Bit	Off	On: The execution command is on. Off: The execution command is off.
(9)	o_bOK	Normal completion	Bit	Off	On: The JOG command is on. Off: The JOG command is off.
(10)	o_bErr	Error completion	Bit	Off	When this label is on, it indicates that an error has occurred in the FB.
(11)	o_uErrId	Error code	Word [unsigned]	0	Stores the abnormal code generated in the FB.

FB details

Item	Description	
Available device	Target module	RD75P2, RD75P4, RD75D2, RD75D4
	CPU module	MELSEC iQ-R series CPU modules
	Engineering tool	GX Works3
Language	Ladder diagram	
Number of basic steps	363 steps The number of steps of the FB embedded in a program depends on the CPU module used, the input/output definitions, and the options setting of GX Works3. For the options setting of GX Works3, refer to the GX Works3 Operating Manual.	
Processing	• By turning on i_bFJog (Forward run JOG command) or i_bRJog (Reverse run JOG command) after i_bEN (Execution command) is turned ON, the JOG operation or inching operation is performed. • When i_bFJog (Forward run JOG command) and i_bRJog (Reverse run JOG command) are on at the same time, the operation stops. • When i_bEN (Execution command) is turned off during the operation that has been started by i_bFJog (Forward run JOG command) or i_bRJog (Reverse run JOG command), the operation stops. • When i_bRJog (Reverse run JOG command) is turned on during the forward run JOG operation, the operation stops. However, when i_bRJog (Reverse run JOG command) is turned on and off, the forward JOG operation restarts. (This relation is also applied to the reverse run JOG operation and i_bFJog (Forward run JOG command.) • If the setting value of the target axis is out of the setting range, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 100 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes.	
FB compilation method	Macro type	
FB operation	Always executed	

Item	Description
Timing chart of I/O signals	■When the operation is completed successfully (Axis 1) • Forward run JOG operation (Inching movement amount 0)  • Forward run inching operation (Inching movement amount other than 0) 

Item	Description
Timing chart of I/O signals	■When the operation is completed with an error (Axis 1) 
Restrictions or precautions	• This FB does not include the error recovery processing. Program the error recovery processing separately in accordance with the required system operation. • This FB cannot be used in an interrupt program. • Do not use this FB in programs that are executed only once, such as a subroutine program or FOR-NEXT loop, because i_bEN (Execution command) cannot be turned off and the normal operation cannot be acquired. Always use this FB in programs that can turn off i_bEN (Execution command). • This FB turns on and off Forward run JOG start signal (Y8, YA, YC, YE) and Reverse run JOG start signal (Y9, YB, YD, YF). Thus, do not turn on or off Forward run JOG start signal (Y8, YA, YC, YE) and Reverse run JOG start signal (Y9, YB, YD, YF) by the other means while this FB is being executed. • When this FB is used twice or more, or when other FB that operates the Y signal same as the signal this FB does, create an interlock to prevent the FBs from being activated at the same time. • When this FB is used twice or more, precaution must be taken to avoid duplication of the target axis. • Setting a large value for the JOG speed from the beginning is dangerous. For safety, set a small value first, and increase the value gradually while checking the operation to determine the value optimal for the control. • When values other than 0 are set in both i_uInching (Cd.16: Inching movement amount) and i_udJogSpd (Cd.17: JOG speed), the inching operation is performed. • When this FB is used in two or more places, a duplicated coil warning may occur during compile operation due to the Y signal being operated by the module label. However, this is not a problem and the FB will operate without an error. • This FB requires the configuration of the ladder for every input label. • To operate the RD75, the logics of the pulse output mode and external I/O signals are required to be set according to each device and system connected. Set the module parameter of GX Works3 according to the application. For the setting method of the module parameter, refer to MELSEC iQ-R Positioning Module User's Manual (Application).

Error code

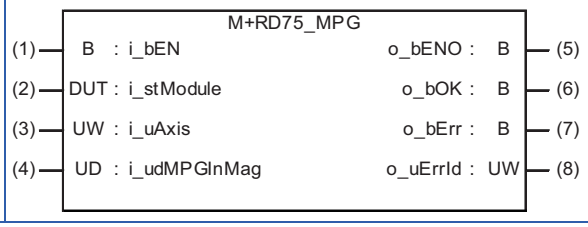
Error code	Description	Action
100H	The set value of i_uAxis (Target axis) is out of the range. The target axis is not within the range of 1 to 4.	Try again after checking the setting. Turn OFF the forward run JOG command or reverse run JOG command, turn ON i_bEN from OFF, and turn ON the forward run JOG command or reverse run JOG command again.

2.4 M+RD75_MPG

Name

M+RD75_MPG

Overview

Item	Description
Overview	Performs the manual pulse generator operation.
Symbol	

Labels

■Input label

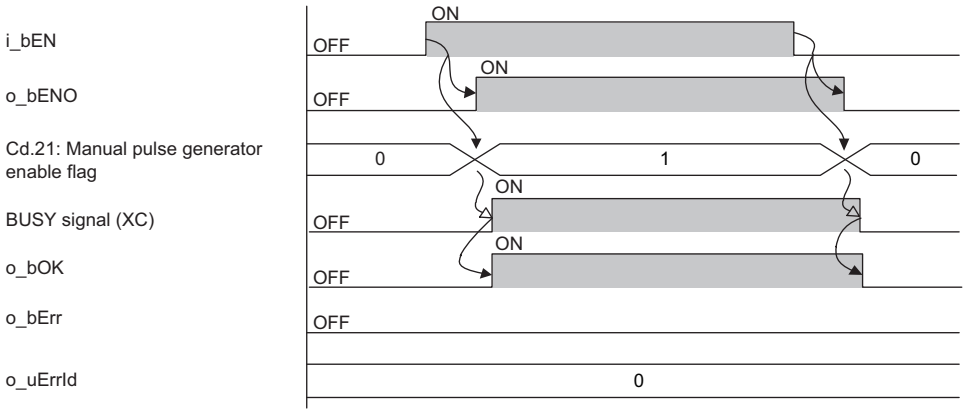
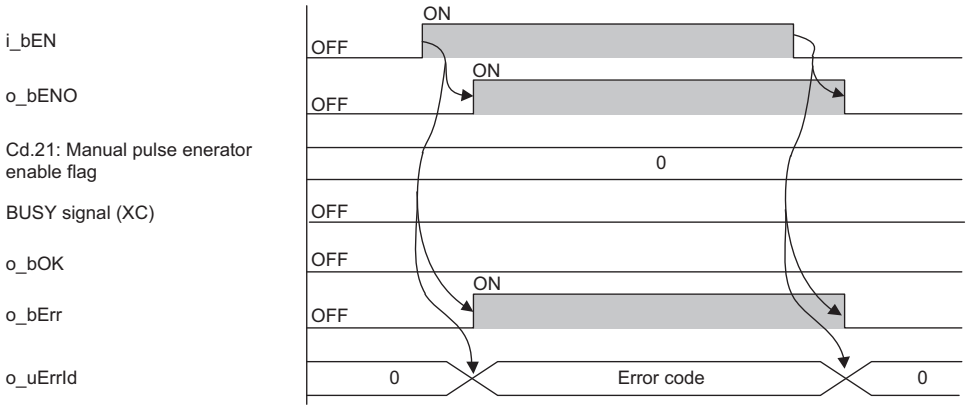
No.	Variable name	Name	Data type	Range	Description
(1)	i_bEN	Execution command	Bit	On or off	On: The FB is activated. Off: The FB is not activated.
(2)	i_stModule	Module label	Structure	The setting range differs depending on the module label.	Specify the module label of the MELSEC iQ-R positioning module.
(3)	i_uAxis	Target axis	Word [unsigned]	1 to 4	Specify the axis number.
(4)	i_udMPGInMag	Cd.20: Manual pulse generator 1 pulse input magnification	Double Word [unsigned]	1 to 10,000	Set the input magnification of the manual pulse generator 1 pulse. • When the set value is 0, the magnification is 1. • When the set value is 10001 or higher, the magnification is 10000.

■Output label

No.	Variable name	Name	Data type	Default value	Description
(5)	o_bENO	Execution status	Bit	Off	On: The execution command is on. Off: The execution command is off.
(6)	o_bOK	Normal completion	Bit	Off	When this label is on, it indicates that the manual pulse generator operation has been enabled.
(7)	o_bErr	Error completion	Bit	Off	When this label is on, it indicates that an error has occurred in the FB.
(8)	o_uErrId	Error code	Word [unsigned]	0	Stores the abnormal code generated in the FB.

FB details

Item	Description	
Available device	Target module	RD75P2, RD75P4, RD75D2, RD75D4
	CPU module	MELSEC iQ-R series CPU modules
	Engineering tool	GX Works3
Language	Ladder diagram	
Number of basic steps	331 steps The number of steps of the FB embedded in a program depends on the CPU module used, the input/output definitions, and the options setting of GX Works3. For the options setting of GX Works3, refer to the GX Works3 Operating Manual.	

Item	Description
Processing	• By turning on or off i_bEN (Execution command), the manual pulse generator operation is enabled or disabled. • This FB is constantly executed after i_bEN (Execution command) is turned on. • The workpiece moves for the number of pulses input from the manual pulse generator while o_bOK (Normal completion) is on. • If the setting value of the target axis is out of the setting range, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 100 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes.
FB compilation method	Macro type
FB operation	Always executed
Timing chart of I/O signals	■When the operation is completed successfully (Axis 1)  ■When the operation is completed with an error (Axis 1) 
Restrictions or precautions	• This FB does not include the error recovery processing. Program the error recovery processing separately in accordance with the required system operation. • This FB cannot be used in an interrupt program. • Do not use this FB in programs that are executed only once, such as a subroutine program or FOR-NEXT loop, because i_bEN (Execution command) cannot be turned off and the normal operation cannot be acquired. Always use this FB in programs that can turn off i_bEN (Execution command). • Do not change i_uAxis (Target axis) while i_bEN (Execution command) is on. • When this FB is used twice or more, precaution must be taken to avoid duplication of the target axis. • This FB requires the configuration of the ladder for every input label. • To operate the RD75, the logics of the pulse output mode and external I/O signals are required to be set according to each device and system connected. Set the module parameter of GX Works3 according to the application. For the setting method of the module parameter, refer to MELSEC iQ-R Positioning Module User's Manual (Application).

Error code

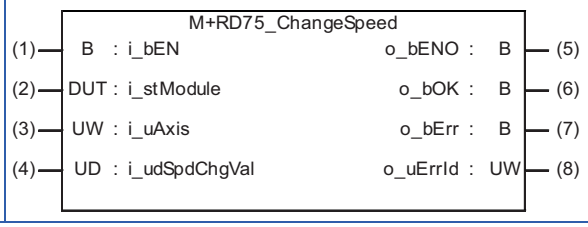
Error code	Description	Action
100H	The set value of i_uAxis (Target axis) is out of the range. The target axis is not within the range of 1 to 4.	Try again after checking the setting.

2.5 M+RD75_ChangeSpeed

Name

M+RD75_ChangeSpeed

Overview

Item	Description
Overview	Changes the speed.
Symbol	

Labels

■Input label

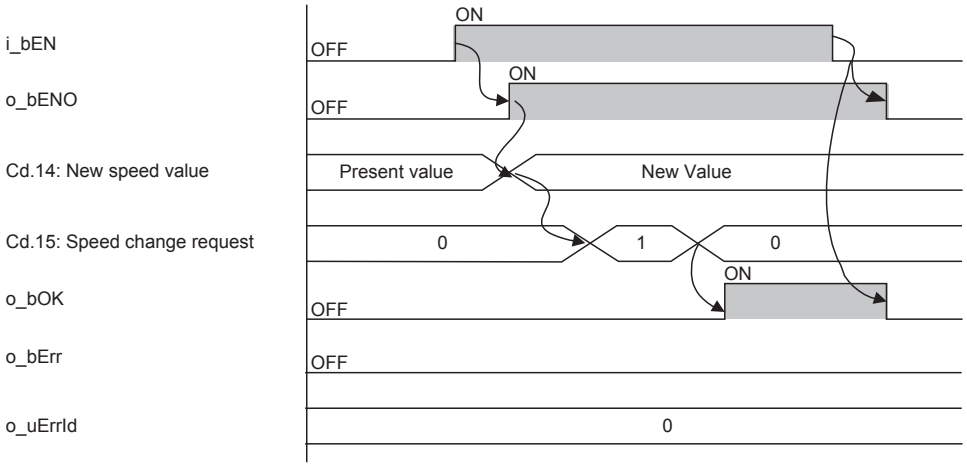
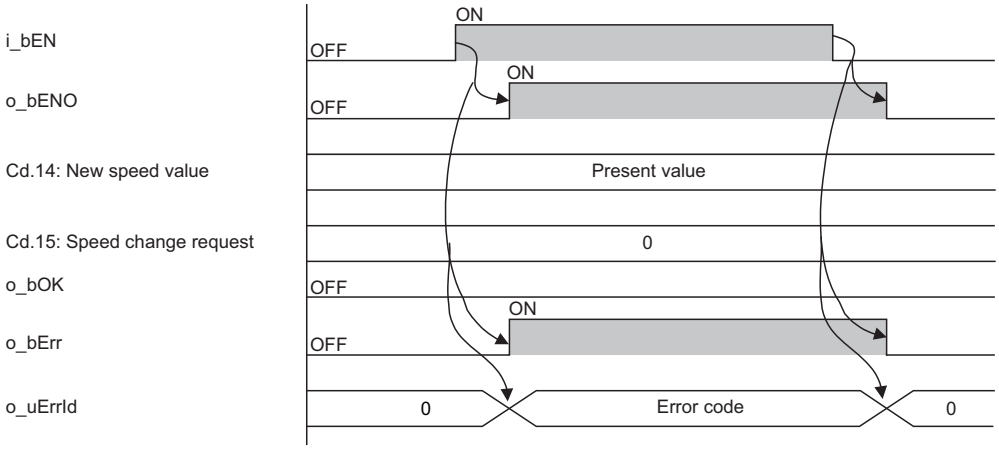
No.	Variable name	Name	Data type	Range	Description
(1)	i_bEN	Execution command	Bit	On or off	On: The FB is activated. Off: The FB is not activated.
(2)	i_stModule	Module label	Structure	The setting range differs depending on the module label.	Specify the module label of the MELSEC iQ-R positioning module.
(3)	i_uAxis	Target axis	Word [unsigned]	1 to 4	Specify the axis number.
(4)	i_udSpdChgVal	Cd.14: New speed value	Double Word [unsigned]	Pr.1: Unit setting = 0, 1 • 0 to 2,000,000,000 Pr.1: Unit setting = 2 • 0 to 3,000,000,000 Pr.1: Unit setting = 3 • 0 to 5,000,000	Set a new speed.

■Output label

No.	Variable name	Name	Data type	Default value	Description
(5)	o_bENO	Execution status	Bit	Off	On: The execution command is on. Off: The execution command is off.
(6)	o_bOK	Normal completion	Bit	Off	When this label is on, it indicates that changing the speed has been completed.
(7)	o_bErr	Error completion	Bit	Off	When this label is on, it indicates that an error has occurred in the FB.
(8)	o_uErrId	Error code	Word [unsigned]	0	Stores the abnormal code generated in the FB.

FB details

Item	Description	
Available device	Target module	RD75P2, RD75P4, RD75D2, RD75D4
	CPU module	MELSEC iQ-R series CPU modules
	Engineering tool	GX Works3
Language	Ladder diagram	
Number of basic steps	211 steps The number of steps of the FB embedded in a program depends on the CPU module used, the input/output definitions, and the options setting of GX Works3. For the options setting of GX Works3, refer to the GX Works3 Operating Manual.	
Processing	• By turning on i_bEN (Execution command), the speed used for the control is changed to a new speed. • If the setting value of the target axis is out of the setting range, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 100 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes.	

Item	Description
FB compilation method	Macro type
FB operation	Pulse execution (multiple scan execution type)
Timing chart of I/O signals	■When the operation is completed successfully  ■When the operation is completed with an error 
Restrictions or precautions	• This FB does not include the error recovery processing. Program the error recovery processing separately in accordance with the required system operation. • This FB cannot be used in an interrupt program. • Do not use this FB in programs that are executed only once, such as a subroutine program or FOR-NEXT loop, because i_bEN (Execution command) cannot be turned off and the normal operation cannot be acquired. Always use this FB in programs that can turn off i_bEN (Execution command). • When this FB is used twice or more, precaution must be taken to avoid duplication of the target axis. • This FB requires the configuration of the ladder for every input label. • When i_bEN (Execution command) is turned on while BUSY signal (XC, XD, XE, XF) is off, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 201 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes. • To operate the RD75, the logics of the pulse output mode and external I/O signals are required to be set according to each device and system connected. Set the module parameter of GX Works3 according to the application. For the setting method of the module parameter, refer to MELSEC iQ-R Positioning Module User's Manual (Application).

Error code

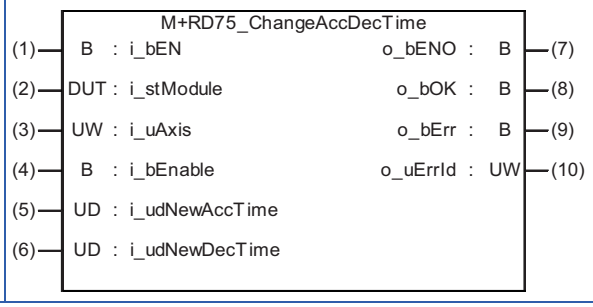
Error code	Description	Action
100H	The set value of i_uAxis (Target axis) is out of the range. The target axis is not within the range of 1 to 4.	Try again after checking the setting.
201H	This FB was executed before the positioning operation started.	Please try again during the positioning operation.

2.6 M+RD75_ChangeAccDecTime

Name

M+RD75_ChangeAccDecTime

Overview

Item	Description
Overview	Changes the acceleration/deceleration time at the speed change.
Symbol	

Labels

■Input label

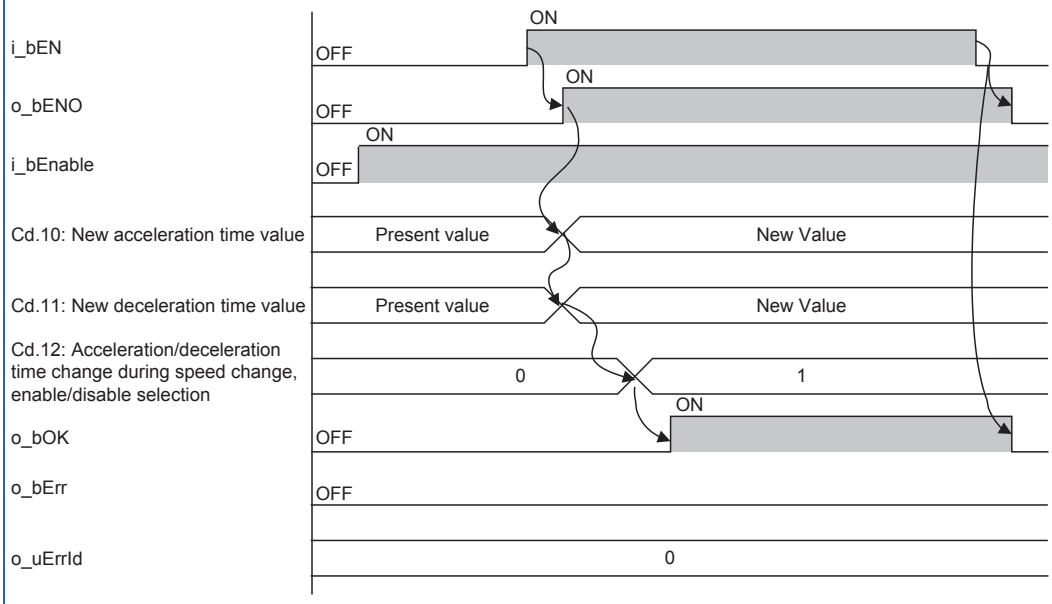
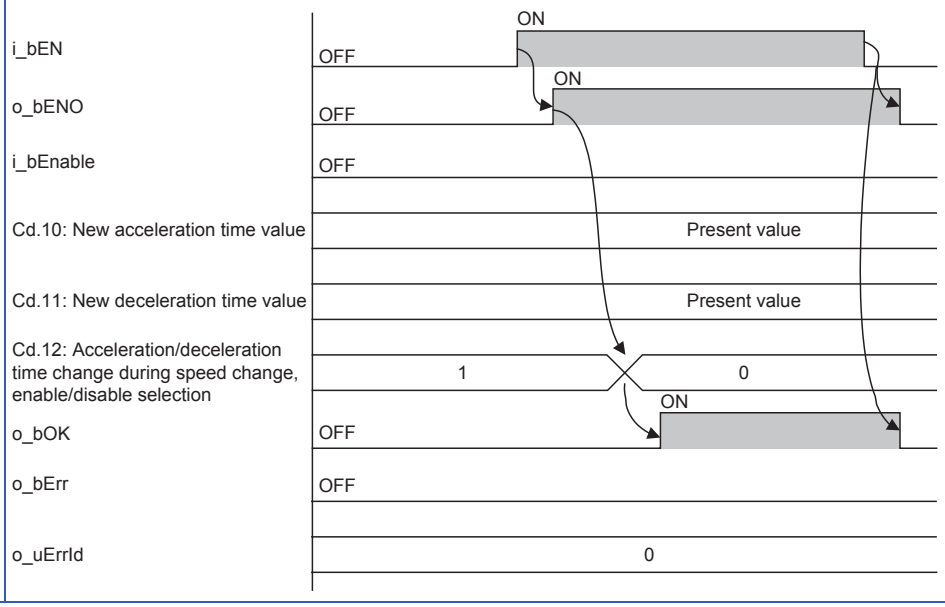
No.	Variable name	Name	Data type	Range	Description
(1)	i_bEN	Execution command	Bit	On or off	On: The FB is activated. Off: The FB is not activated.
(2)	i_stModule	Module label	Structure	The setting range differs depending on the module label.	Specify the module label of the MELSEC iQ-R positioning module.
(3)	i_uAxis	Target axis	Word [unsigned]	1 to 4	Specify the axis number.
(4)	i_bEnable	Acceleration/ deceleration time change enabled flag	Bit	On: Enabled Off: Disabled	Set this label to enable or disable the acceleration/ deceleration time change.
(5)	i_udNewAccTime	Cd.10: New acceleration time value	Double Word [unsigned]	0 to 8388608 (ms)	Set a new acceleration time. When 0 is set, the acceleration time is not changed after the speed is changed. In this case, the operation is controlled at the previously set acceleration time.
(6)	i_udNewDecTime	Cd.11: New deceleration time value	Double Word [unsigned]	0 to 8388608 (ms)	Set a new deceleration time. When 0 is set, the deceleration time is not changed after the speed is changed. In this case, the operation is controlled at the previously set deceleration time.

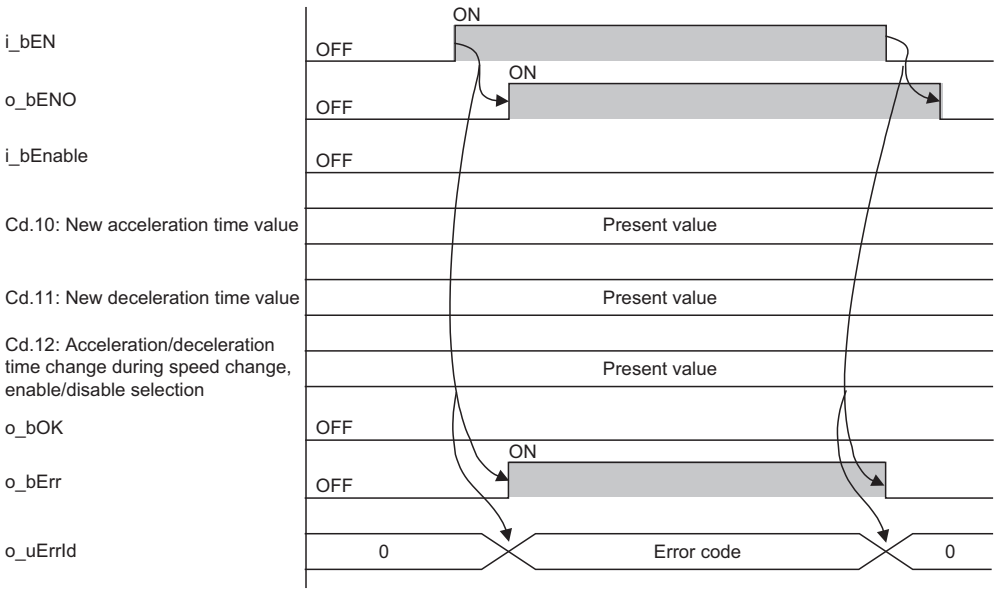
■Output label

No.	Variable name	Name	Data type	Default value	Description
(7)	o_bENO	Execution status	Bit	Off	On: The execution command is on. Off: The execution command is off.
(8)	o_bOK	Normal completion	Bit	Off	When this label is on, it indicates that setting the acceleration/deceleration time change has been completed.
(9)	o_bErr	Error completion	Bit	Off	When this label is on, it indicates that an error has occurred in the FB.
(10)	o_uErrId	Error code	Word [unsigned]	0	Stores the abnormal code generated in the FB.

FB details

Item	Description	
Available device	Target module	RD75P2, RD75P4, RD75D2, RD75D4
	CPU module	MELSEC iQ-R series CPU modules
	Engineering tool	GX Works3
Language	Ladder diagram	
Number of basic steps	204 steps The number of steps of the FB embedded in a program depends on the CPU module used, the input/output definitions, and the options setting of GX Works3. For the options setting of GX Works3, refer to the GX Works3 Operating Manual.	
Processing	• By turning on i_bEN (Execution command), the setting of acceleration/deceleration time is changed according to i_bEnable (Acceleration/deceleration time change enabled flag). When i_bEnable (Acceleration/deceleration time change enabled flag) is on, i_udNewAccTime (Cd.10: New acceleration time value) and i_udNewDecTime (Cd.11: New deceleration time value) are set and Cd.12: Acceleration/deceleration time change during speed change, enable/disable selection is changed to 1: Acceleration/deceleration time change enabled. When i_bEnable (Acceleration/deceleration time change enabled flag) is off, i_udNewAccTime (Cd.10: New acceleration time value) and i_udNewDecTime (Cd.11: New deceleration time value) are not changed and Cd.12: Acceleration/deceleration time change during speed change, enable/disable selection is changed to 0: Acceleration/deceleration time change disabled. • If the setting value of the target axis is out of the setting range, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 100 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes.	
FB compilation method	Macro type	
FB operation	Pulsed execution (single scan execution type)	

Item	Description
Timing chart of I/O signals	■When the operation is completed successfully • Cd.12: Acceleration/deceleration time change during speed change, enable/disable selection is enabled  • Cd.12: Acceleration/deceleration time change during speed change, enable/disable selection is disabled 

Item	Description
Timing chart of I/O signals	■When the operation is completed with an error 
Restrictions or precautions	• This FB does not include the error recovery processing. Program the error recovery processing separately in accordance with the required system operation. • This FB cannot be used in an interrupt program. • Do not use this FB in programs that are executed only once, such as a subroutine program or FOR-NEXT loop, because i_bEN (Execution command) cannot be turned off and the normal operation cannot be acquired. Always use this FB in programs that can turn off i_bEN (Execution command). • When this FB is used twice or more, precaution must be taken to avoid duplication of the target axis. • A duplicated coil warning may occur during the compile operation. However, this is not a problem and the FB will operate without an error. • This FB requires the configuration of the ladder for every input label. • To operate the RD75, the logics of the pulse output mode and external I/O signals are required to be set according to each device and system connected. Set the module parameter of GX Works3 according to the application. For the setting method of the module parameter, refer to MELSEC iQ-R Positioning Module User's Manual (Application).

Error code

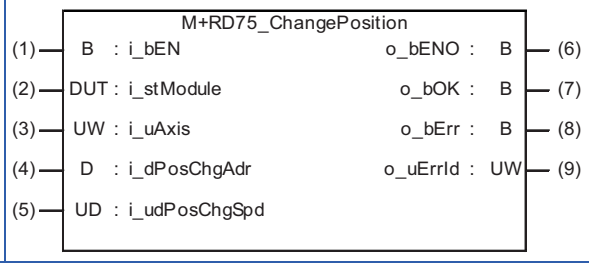
Error code	Description	Action
100H	The set value of i_uAxis (Target axis) is out of the range. The target axis is not within the range of 1 to 4.	Try again after checking the setting.

2.7 M+RD75_ChangePosition

Name

M+RD75_ChangePosition

Overview

Item	Description
Overview	Changes the target position.
Symbol	

Labels

■Input label

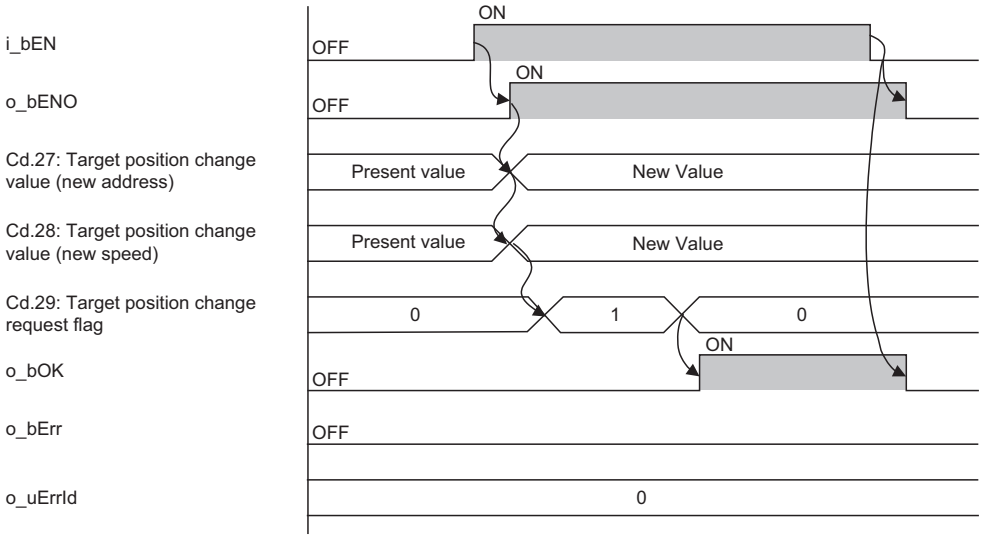
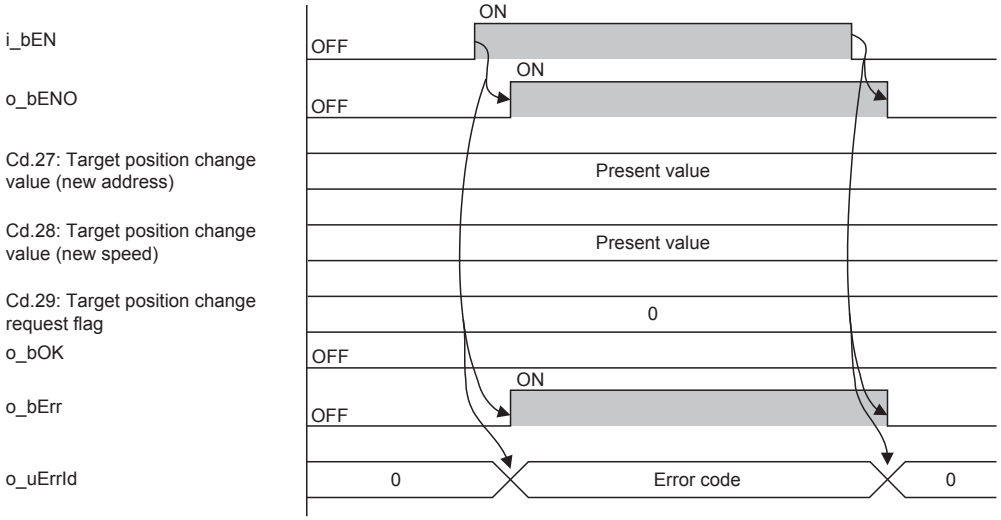
No.	Variable name	Name	Data type	Range	Description
(1)	i_bEN	Execution command	Bit	On or off	On: The FB is activated. Off: The FB is not activated.
(2)	i_stModule	Module label	Structure	The setting range differs depending on the module label.	Specify the module label of the MELSEC iQ-R positioning module.
(3)	i_uAxis	Target axis	Word [unsigned]	1 to 4	Specify the axis number.
(4)	i_dPosChgAdr	Cd.27: Target position change value (new address)	Double word [signed]	Pr.1: Unit setting = 2 • In ABS mode: 0 to 35999999 • In INC mode: -2147483648 to 2147483647 Pr.1: Unit setting = Other than 2 • -2,147,483,648 to 2,147,483,647	Set a new positioning address to change the target position during positioning.
(5)	i_udPosChgSpd	Cd.28: Target position change value (new speed)	Double Word [unsigned]	Pr.1: Unit setting = 0, 1 • 0 to 2,000,000,000 Pr.1: Unit setting = 2 • 0 to 3,000,000,000 Pr.1: Unit setting = 4 • 0 to 5,000,000	Set a new speed to change the target position during positioning. When 0 is set, the speed is not changed.

■Output label

No.	Variable name	Name	Data type	Default value	Description
(6)	o_bENO	Execution status	Bit	Off	On: The execution command is on. Off: The execution command is off.
(7)	o_bOK	Normal completion	Bit	Off	When this label is on, it indicates that the module has accepted the target position change request values.
(8)	o_bErr	Error completion	Bit	Off	When this label is on, it indicates that an error has occurred in the FB.
(9)	o_uErrId	Error code	Word [unsigned]	0	Stores the abnormal code generated in the FB.

FB details

Item	Description	
Available device	Target module	RD75P2, RD75P4, RD75D2, RD75D4
	CPU module	MELSEC iQ-R series CPU modules
	Engineering tool	GX Works3
Language	Ladder diagram	

Item	Description
Number of basic steps	253 steps The number of steps of the FB embedded in a program depends on the CPU module used, the input/output definitions, and the options setting of GX Works3. For the options setting of GX Works3, refer to the GX Works3 Operating Manual.
Processing	• By turning on i_bEN (Execution command), the target position is changed according to the value set in i_dPosChgAdr (Cd.27: Target position change value (new address)) and the command speed is changed according to the value set in i_udPosChgSpd (Cd.28: Target position change value (new speed)) during the position control. • If the setting value of the target axis is out of the setting range, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 100 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes.
FB compilation method	Macro type
FB operation	Pulse execution (multiple scan execution type)
Timing chart of I/O signals	■When the operation is completed successfully  ■When the operation is completed with an error 
Restrictions or precautions	• This FB does not include the error recovery processing. Program the error recovery processing separately in accordance with the required system operation. • This FB cannot be used in an interrupt program. • Do not use this FB in programs that are executed only once, such as a subroutine program or FOR-NEXT loop, because i_bEN (Execution command) cannot be turned off and the normal operation cannot be acquired. Always use this FB in programs that can turn off i_bEN (Execution command). • When this FB is used twice or more, precaution must be taken to avoid duplication of the target axis. • This FB requires the configuration of the ladder for every input label. • When i_bEN (Execution command) is turned on while BUSY signal (XC, XD, XE, XF) is off, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 201 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes. • To operate the RD75, the logics of the pulse output mode and external I/O signals are required to be set according to each device and system connected. Set the module parameter of GX Works3 according to the application. For the setting method of the module parameter, refer to MELSEC iQ-R Positioning Module User's Manual (Application).

Error code

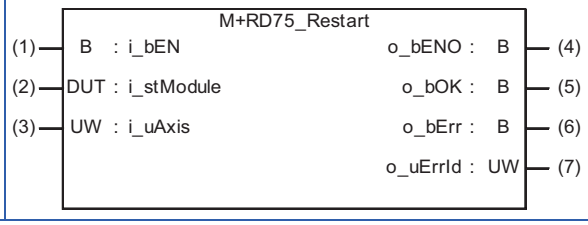
Error code	Description	Action
100H	The set value of i_uAxis (Target axis) is out of the range. The target axis is not within the range of 1 to 4.	Try again after checking the setting.
201H	This FB was executed before the positioning operation started.	Please try again during the positioning operation.

2.8 M+RD75_Restart

Name

M+RD75_Restart

Overview

Item	Description
Overview	Restarts the axis being stopped.
Symbol	

Labels

■Input label

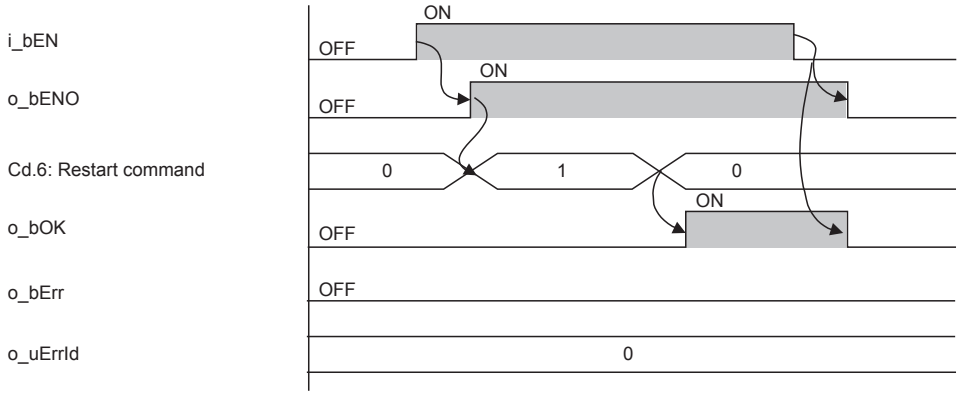
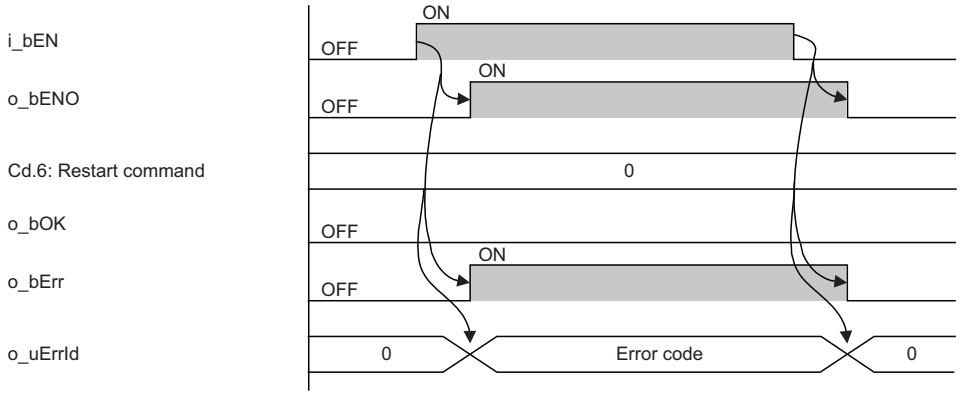
No.	Variable name	Name	Data type	Range	Description
(1)	i_bEN	Execution command	Bit	On or off	On: The FB is activated. Off: The FB is not activated.
(2)	i_stModule	Module label	Structure	The setting range differs depending on the module label.	Specify the module label of the MELSEC iQ-R positioning module.
(3)	i_uAxis	Target axis	Word [unsigned]	1 to 4	Specify the axis number.

■Output label

No.	Variable name	Name	Data type	Default value	Description
(4)	o_bENO	Execution status	Bit	Off	On: The execution command is on. Off: The execution command is off.
(5)	o_bOK	Normal completion	Bit	Off	When this label is on, it indicates that the module has accepted the restart command request.
(6)	o_bErr	Error completion	Bit	Off	When this label is on, it indicates that an error has occurred in the FB.
(7)	o_uErrId	Error code	Word [unsigned]	0	Stores the abnormal code generated in the FB.

FB details

Item	Description	
Available device	Target module	RD75P2, RD75P4, RD75D2, RD75D4
	CPU module	MELSEC iQ-R series CPU modules
	Engineering tool	GX Works3
Language	Ladder diagram	
Number of basic steps	215 steps The number of steps of the FB embedded in a program depends on the CPU module used, the input/output definitions, and the options setting of GX Works3. For the options setting of GX Works3, refer to the GX Works3 Operating Manual.	
Processing	• Only when the following conditions are satisfied, the positioning operation that is stopped due to an error is restarted by turning on i_bEN (Execution command). If any of the conditions is not satisfied, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 202 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes. (The conditions are the following: Positioning complete signal (X14, X15, X16, X17) is off and the axis operation status is stopped.) • If the setting value of the target axis is out of the setting range, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 100 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes.	
FB compilation method	Macro type	

Item	Description
FB operation	Pulse execution (multiple scan execution type)
Timing chart of I/O signals	■When the operation is completed successfully  ■When the operation is completed with an error 
Restrictions or precautions	• This FB does not include the error recovery processing. Program the error recovery processing separately in accordance with the required system operation. • This FB cannot be used in an interrupt program. • Do not use this FB in programs that are executed only once, such as a subroutine program or FOR-NEXT loop, because i_bEN (Execution command) cannot be turned off and the normal operation cannot be acquired. Always use this FB in programs that can turn off i_bEN (Execution command). • When this FB is used twice or more, precaution must be taken to avoid duplication of the target axis. • This FB requires the configuration of the ladder for every input label. • To operate the RD75, the logics of the pulse output mode and external I/O signals are required to be set according to each device and system connected. Set the module parameter of GX Works3 according to the application. For the setting method of the module parameter, refer to MELSEC iQ-R Positioning Module User's Manual (Application).

Error code

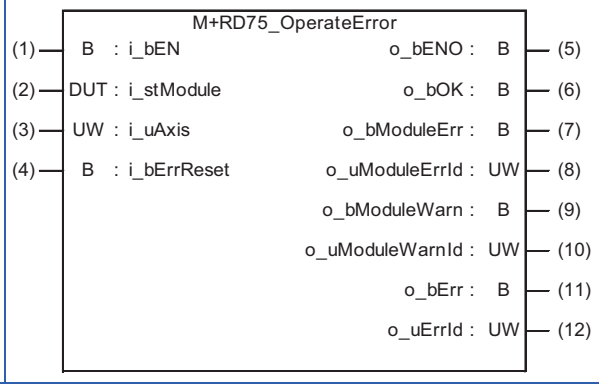
Error code	Description	Action
100H	The set value of i_uAxis (Target axis) is out of the range. The target axis is not within the range of 1 to 4.	Try again after checking the setting.
202H	The conditions for positioning restart are not satisfied. Any of the following conditions is not satisfied. • Positioning complete signal: Off • Axis operation status: Stopped	Execute the FB again when all of the following conditions are satisfied. • Positioning complete signal: Off • Axis operation status: Stopped

2.9 M+RD75_OperateError

Name

M+RD75_OperateError

Overview

Item	Description
Overview	Monitors errors and warnings, and resets errors.
Symbol	

Labels

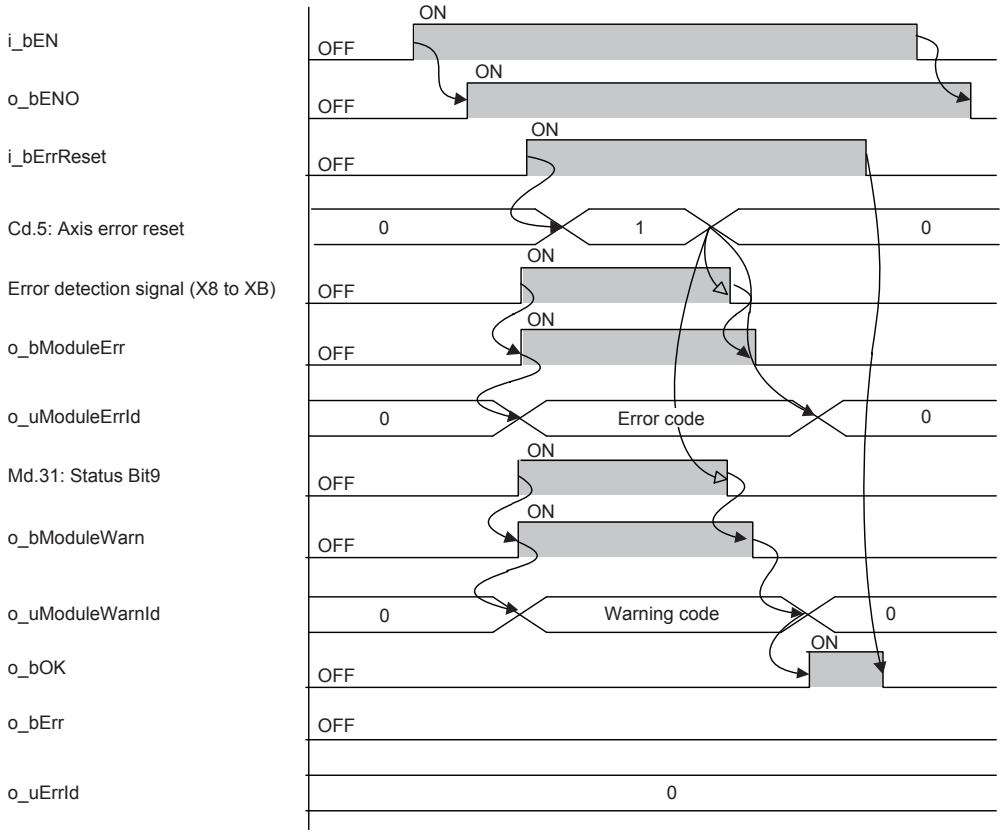
■Input label

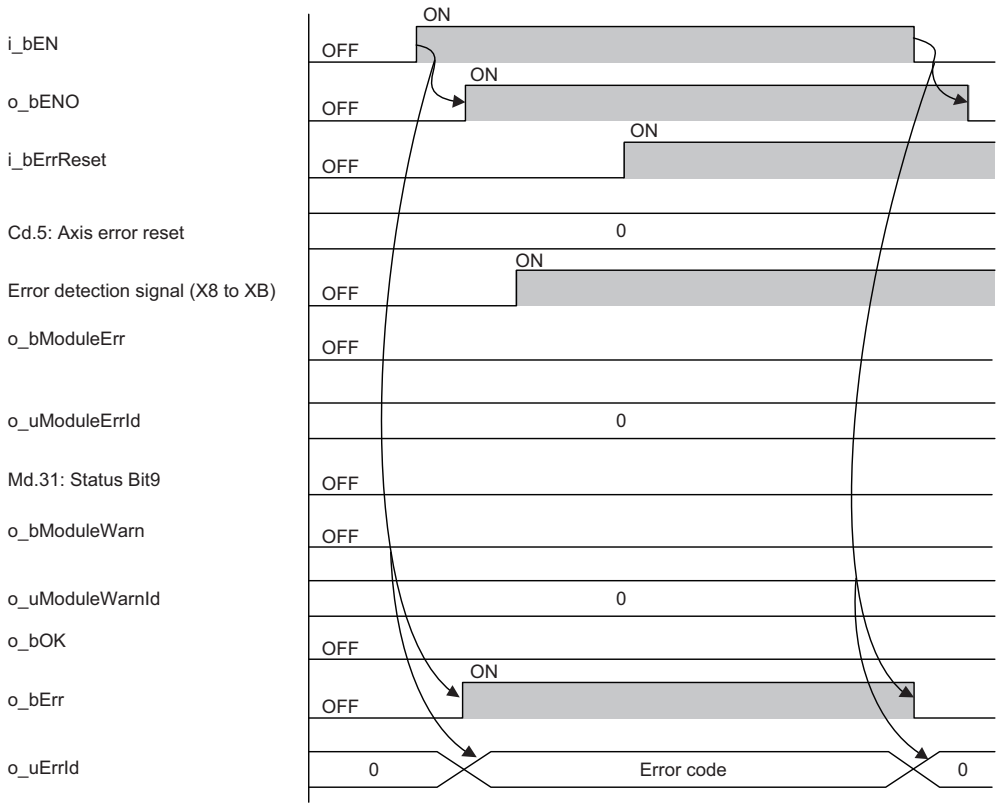
No.	Variable name	Name	Data type	Range	Description
(1)	i_bEN	Execution command	Bit	On or off	On: The FB is activated. Off: The FB is not activated.
(2)	i_stModule	Module label	Structure	The setting range differs depending on the module label.	Specify the module label of the MELSEC iQ-R positioning module.
(3)	i_uAxis	Target axis	Word [unsigned]	1 to 4	Specify the axis number.
(4)	i_bErrReset	Error reset command	Bit	On or off	On: Errors are reset. Off: Errors are not reset.

■Output label

No.	Variable name	Name	Data type	Default value	Description
(5)	o_bENO	Execution status	Bit	Off	On: The execution command is on. Off: The execution command is off.
(6)	o_bOK	Normal completion	Bit	Off	When this label is on, it indicates that resetting the errors has been completed.
(7)	o_bModuleErr	Axis error detection	Bit	Off	When this label is on, it indicates that an axis error has occurred.
(8)	o_uModuleErrId	Axis error code	Word [unsigned]	0	The error code of the error that has occurred in the module of the specified axis is stored.
(9)	o_bModuleWarn	Axis warning detection	Bit	Off	When this label is on, it indicates that an axis warning has occurred.
(10)	o_uModuleWarnId	Axis warning code	Word [unsigned]	0	The warning code of the warning that has occurred in the module of the specified axis is stored.
(11)	o_bErr	Error completion	Bit	Off	When this label is on, it indicates that an error has occurred in the FB.
(12)	o_uErrId	Error code	Word [unsigned]	0	Stores the abnormal code generated in the FB.

FB details

Item	Description	
Available device	Target module	RD75P2, RD75P4, RD75D2, RD75D4
	CPU module	MELSEC iQ-R series CPU modules
	Engineering tool	GX Works3
Language	Ladder diagram	
Number of basic steps	387 steps The number of steps of the FB embedded in a program depends on the CPU module used, the input/output definitions, and the options setting of GX Works3. For the options setting of GX Works3, refer to the GX Works3 Operating Manual.	
Processing	• By turning on i_bEN (Execution command), errors of the target axis are monitored. • When a module error occurs, an error code is stored in o_uModuleErrId (Axis error code). • After i_bEN (Execution command) is turned ON, the generated error is reset by turning on i_bErrReset (Error reset command). • When a warning occurs in the module, the warning can be reset by turning on i_bErrReset (Error reset command). • If the setting value of the target axis is out of the setting range, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 100 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes.	
FB compilation method	Macro type	
FB operation	Always executed	
Timing chart of I/O signals	■When the operation is completed successfully  	

Item	Description
Timing chart of I/O signals	■When the operation is completed with an error 
Restrictions or precautions	• This FB does not include the error recovery processing. Program the error recovery processing separately in accordance with the required system operation. • This FB cannot be used in an interrupt program. • Do not use this FB in programs that are executed only once, such as a subroutine program or FOR-NEXT loop, because i_bEN (Execution command) cannot be turned off and the normal operation cannot be acquired. Always use this FB in programs that can turn off i_bEN (Execution command). • When this FB is used twice or more, precaution must be taken to avoid duplication of the target axis. • Do not change i_uAxis (Target axis) while i_bEN (Execution command) is on. • This FB requires the configuration of the ladder for every input label. • To operate the RD75, the logics of the pulse output mode and external I/O signals are required to be set according to each device and system connected. Set the module parameter of GX Works3 according to the application. For the setting method of the module parameter, refer to MELSEC iQ-R Positioning Module User's Manual (Application).

Error code

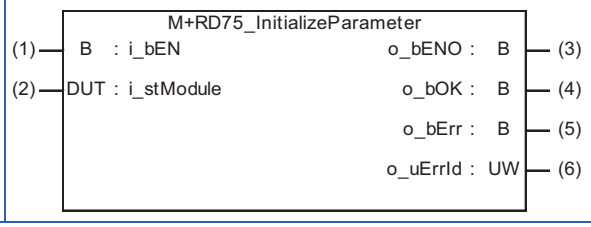
Error code	Description	Action
100H	The set value of i_uAxis (Target axis) is out of the range. The target axis is not within the range of 1 to 4.	Try again after checking the setting.

2.10 M+RD75_InitializeParameter

Name

M+RD75_InitializeParameter

Overview

Item	Description
Overview	Initializes parameters.
Symbol	

Labels

■Input label

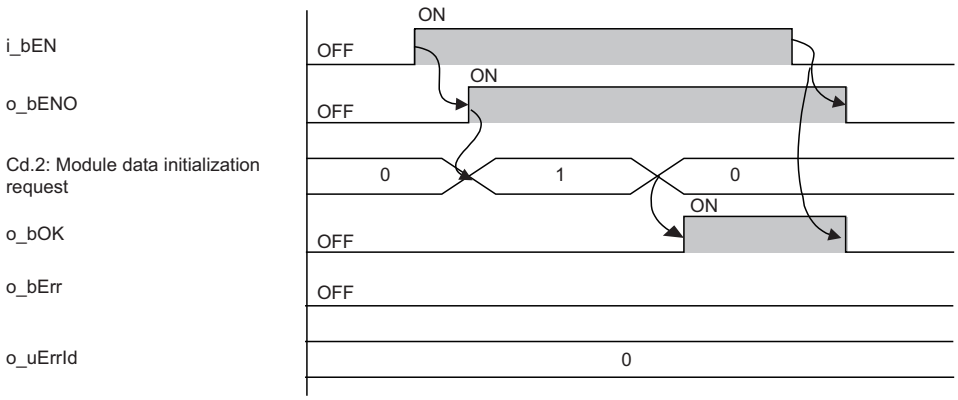
No.	Variable name	Name	Data type	Range	Description
(1)	i_bEN	Execution command	Bit	On or off	On: The FB is activated. Off: The FB is not activated.
(2)	i_stModule	Module label	Structure	The setting range differs depending on the module label.	Specify the module label of the MELSEC iQ-R positioning module.

■Output label

No.	Variable name	Name	Data type	Default value	Description
(3)	o_bENO	Execution status	Bit	Off	On: The execution command is on. Off: The execution command is off.
(4)	o_bOK	Normal completion	Bit	Off	When this label is on, it indicates that initializing parameters has been completed.
(5)	o_bErr	Error completion	Bit	Off	Always off
(6)	o_uErrId	Error code	Word [unsigned]	0	Always 0

FB details

Item	Description	
Available device	Target module	RD75P2, RD75P4, RD75D2, RD75D4
	CPU module	MELSEC iQ-R series CPU modules
	Engineering tool	GX Works3
Language	Ladder diagram	
Number of basic steps	33 steps The number of steps of the FB embedded in a program depends on the CPU module used, the input/output definitions, and the options setting of GX Works3. For the options setting of GX Works3, refer to the GX Works3 Operating Manual.	
Processing	By turning on i_bEN (Execution command), the setting data stored in the buffer memory and the flash ROM of the RD75 is reset to the factory setting.	
FB compilation method	Macro type	
FB operation	Pulse execution (multiple scan execution type)	

Item	Description
Timing chart of I/O signals	
Restrictions or precautions	• This FB does not include the error recovery processing. Program the error recovery processing separately in accordance with the required system operation. • This FB cannot be used in an interrupt program. • Do not use this FB in programs that are executed only once, such as a subroutine program or FOR-NEXT loop, because i_bEN (Execution command) cannot be turned off and the normal operation cannot be acquired. Always use this FB in programs that can turn off i_bEN (Execution command). • This FB requires the configuration of the ladder for every input label. • Before using this FB, check that PLC READY signal (Y0) is off. • After the setting data is initialized, reset the CPU module or power on the programmable controller again. • To operate the RD75, the logics of the pulse output mode and external I/O signals are required to be set according to each device and system connected. Set the module parameter of GX Works3 according to the application. For the setting method of the module parameter, refer to MELSEC iQ-R Positioning Module User's Manual (Application).

Error code

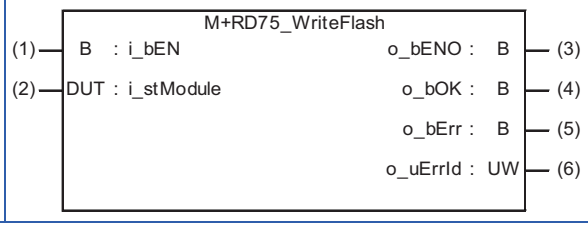
Error code	Description	Action
None	None	None

2.11 M+RD75_WriteFlash

Name

M+RD75_WriteFlash

Overview

Item	Description
Overview	Writes positioning data and block start data in the buffer memory to the flash ROM.
Symbol	

Labels

■Input label

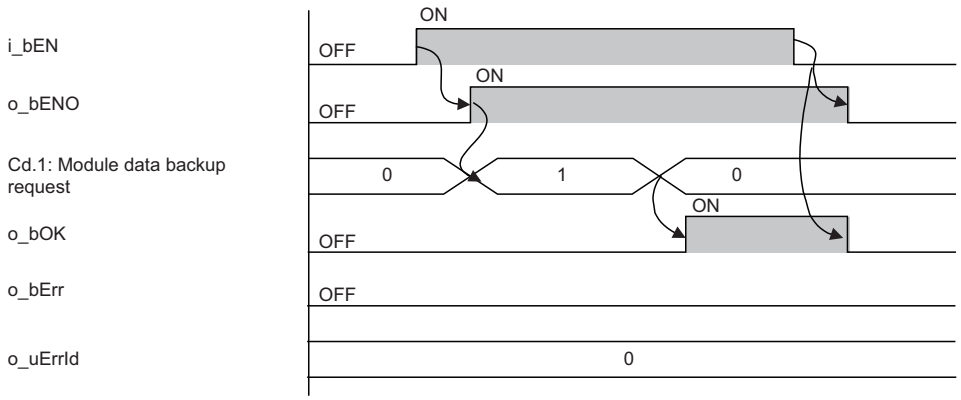
No.	Variable name	Name	Data type	Range	Description
(1)	i_bEN	Execution command	Bit	On or off	On: The FB is activated. Off: The FB is not activated.
(2)	i_stModule	Module label	Structure	The setting range differs depending on the module label.	Specify the module label of the MELSEC iQ-R positioning module.

■Output label

No.	Variable name	Name	Data type	Default value	Description
(3)	o_bENO	Execution status	Bit	Off	On: The execution command is on. Off: The execution command is off.
(4)	o_bOK	Normal completion	Bit	Off	When this label is on, it indicates that writing the setting data to the flash ROM has been completed.
(5)	o_bErr	Error completion	Bit	Off	Always off
(6)	o_uErrId	Error code	Word [unsigned]	0	Always 0

FB details

Item	Description	
Available device	Target module	RD75P2, RD75P4, RD75D2, RD75D4
	CPU module	MELSEC iQ-R series CPU modules
	Engineering tool	GX Works3
Language	Ladder diagram	
Number of basic steps	33 steps The number of steps of the FB embedded in a program depends on the CPU module used, the input/output definitions, and the options setting of GX Works3. For the options setting of GX Works3, refer to the GX Works3 Operating Manual.	
Processing	By turning on i_bEN (Execution command), the setting data in the buffer memory is written to the flash ROM.	
FB compilation method	Macro type	
FB operation	Pulse execution (multiple scan execution type)	

Item	Description
Timing chart of I/O signals	
Restrictions or precautions	• This FB does not include the error recovery processing. Program the error recovery processing separately in accordance with the required system operation. • This FB cannot be used in an interrupt program. • Do not use this FB in programs that are executed only once, such as a subroutine program or FOR-NEXT loop, because i_bEN (Execution command) cannot be turned off and the normal operation cannot be acquired. Always use this FB in programs that can turn off i_bEN (Execution command). • This FB requires the configuration of the ladder for every input label. • Before using this FB, check that PLC READY signal (Y0) is off. • To operate the RD75, the logics of the pulse output mode and external I/O signals are required to be set according to each device and system connected. Set the module parameter of GX Works3 according to the application. For the setting method of the module parameter, refer to MELSEC iQ-R Positioning Module User's Manual (Application).

Error code

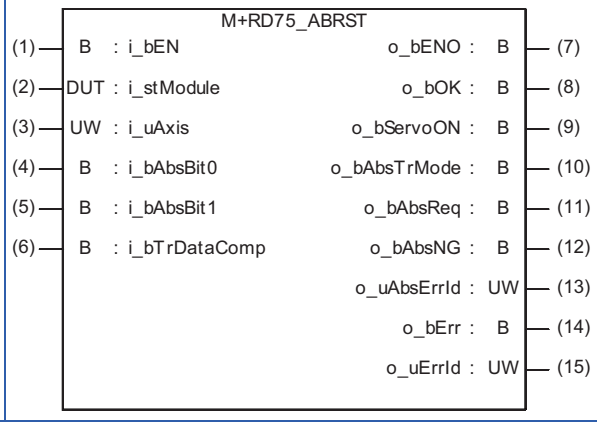
Error code	Description	Action
None	None	None

2.12 M+RD75_ABRST

Name

M+RD75_ABRST

Overview

Item	Description
Overview	Restores the absolute position.
Symbol	

Labels

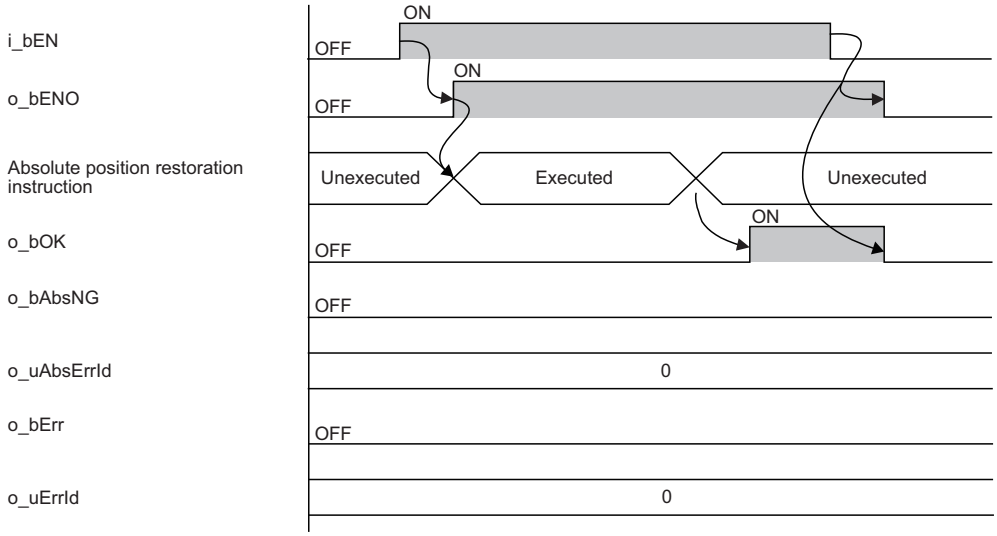
■Input label

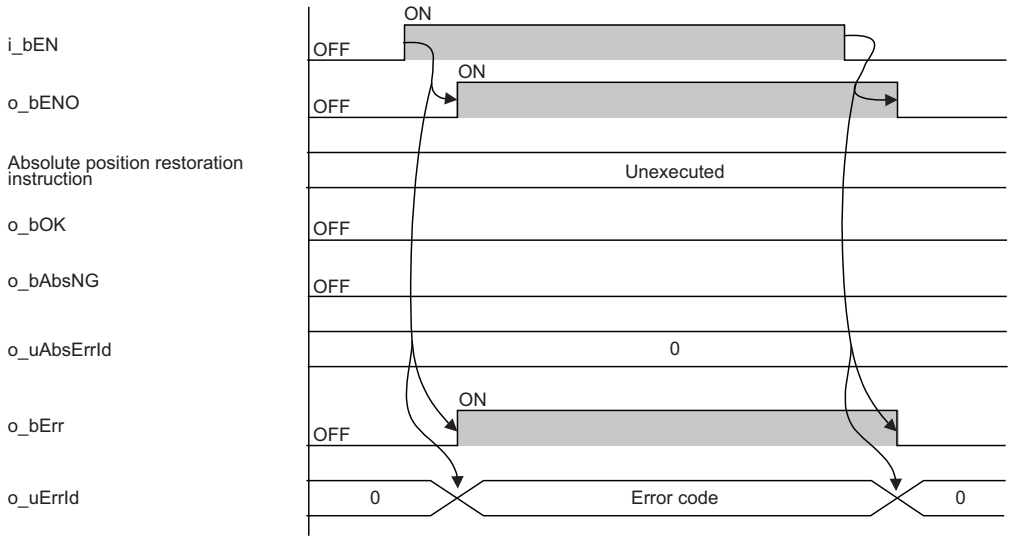
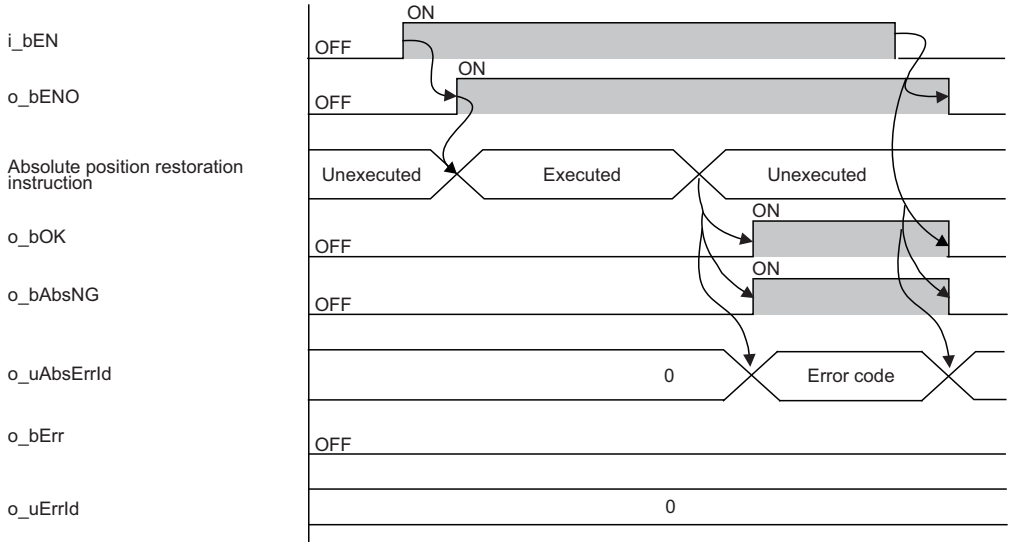
No.	Variable name	Name	Data type	Range	Description
(1)	i_bEN	Execution command	Bit	On or off	On: The FB is activated. Off: The FB is not activated.
(2)	i_stModule	Module label	Structure	The setting range differs depending on the module label.	Specify the module label of the MELSEC iQ-R positioning module.
(3)	i_uAxis	Target axis	Word [unsigned]	1 to 4	Specify the axis number.
(4)	i_bAbsBit0	ABS data bit 0	Bit	On or off	The lower bit of the data received from the servo amplifier
(5)	i_bAbsBit1	ABS data bit 1	Bit	On or off	The upper bit of the data received from the servo amplifier
(6)	i_bTrDataComp	ABS transmission data ready	Bit	On: Ready Off: In preparation	The ready signal from the servo amplifier

■Output label

No.	Variable name	Name	Data type	Default value	Description
(7)	o_bENO	Execution status	Bit	Off	On: The execution command is on. Off: The execution command is off.
(8)	o_bOK	Normal completion	Bit	Off	When this label is on, it indicates that the absolute position restoration request has been completed.
(9)	o_bServoON	Servo ON signal	Bit	Off	Servo ON signal is on while this label is on.
(10)	o_bAbsTrMode	ABS transmission mode	Bit	Off	The servo amplifier is in the ABS transmission mode while this label is on.
(11)	o_bAbsReq	ABS request flag	Bit	Off	The ABS data is requested while this label is on.
(12)	o_bAbsNG	ABS error	Bit	Off	When this label is on, it indicates that the absolute position restoration has been completed with an error.
(13)	o_uAbsErrId	ABS error code	Word [unsigned]	0	The error code of the absolute position restoration instruction is stored. For the error codes, refer to MELSEC iQ-R Positioning Module User's Manual (Application).
(14)	o_bErr	Error completion	Bit	Off	When this label is on, it indicates that an error has occurred in the FB.
(15)	o_uErrId	Error code	Word [unsigned]	0	Stores the abnormal code generated in the FB.

FB details

Item	Description	
Available device	Target module	RD75P2, RD75P4, RD75D2, RD75D4
	CPU module	MELSEC iQ-R series CPU modules
	Engineering tool	GX Works3
Language	Ladder diagram	
Number of basic steps	162 steps The number of steps of the FB embedded in a program depends on the CPU module used, the input/output definitions, and the options setting of GX Works3. For the options setting of GX Works3, refer to the GX Works3 Operating Manual.	
Processing	• By turning on i_bEN (Execution command), the absolute position is restored. • When the absolute position restoration is completed with an error, o_bAbsNG (ABS error) turns on and an error code is stored in o_uAbsErrId (ABS error code). For the error codes, refer to MELSEC iQ-R Positioning Module User's Manual (Application). • If the setting value of the target axis is out of the setting range, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 100 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes.	
FB compilation method	Macro type	
FB operation	Pulse execution (multiple scan execution type)	
Timing chart of I/O signals	■When the operation is completed successfully  	

Item	Description
Timing chart of I/O signals	■When the operation is completed with an error • Out of the target axis setting range  • The absolute position restoration instruction is completed with an error 
Restrictions or precautions	• This FB does not include the error recovery processing. Program the error recovery processing separately in accordance with the required system operation. • This FB cannot be used in an interrupt program. • Do not use this FB in programs that are executed only once, such as a subroutine program or FOR-NEXT loop, because i_bEN (Execution command) cannot be turned off and the normal operation cannot be acquired. Always use this FB in programs that can turn off i_bEN (Execution command). • When this FB is used twice or more, precaution must be taken to avoid duplication of the target axis. • This FB requires the configuration of the ladder for every input label. • Before using this FB, check that PLC READY signal (Y0) is off. • When this FB is used, i_bEN (Execution command) is required to be on even after the absolute position restoration has been completed. • Do not turn off i_bEN (Execution command) during the absolute position restoration. If i_bEN (Execution command) is turned off before the absolute position restoration is completed, an error occurs when i_bEN (Execution command) is turned on, and the error 1861 (Dedicated instruction error) is stored in o_uAbsErrId (ABS error code). When the error 1861 (Dedicated instruction error) has occurred, reset the error and turn off and on i_bEN (Execution command) again. • To operate the RD75, the logics of the pulse output mode and external I/O signals are required to be set according to each device and system connected. Set the module parameter of GX Works3 according to the application. For the setting method of the module parameter, refer to MELSEC iQ-R Positioning Module User's Manual (Application).

Error code

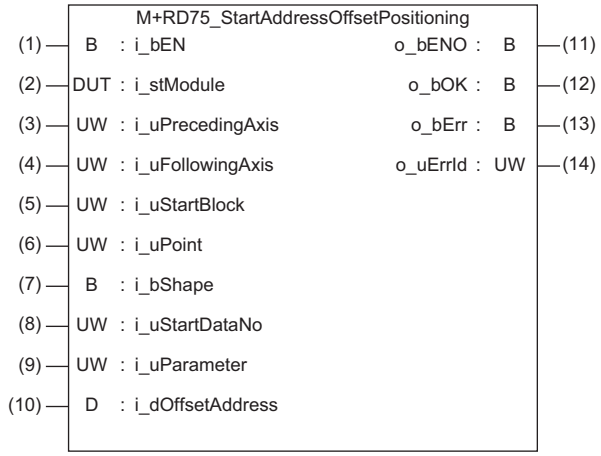
Error code	Description	Action
100H	The set value of i_uAxis (Target axis) is out of the range. The target axis is not within the range of 1 to 4.	Try again after checking the setting.

2.13 M+RD75_StartAddressOffsetPositioning

Name

M+RD75_StartAddressOffsetPositioning

Overview

Item	Description
Overview	Starts one of the axes after the other axis has started and moved for a specified movement amount.
Symbol	

Labels

■Input label

No.	Variable name	Name	Data type	Range	Description
(1)	i_bEN	Execution command	Bit	On or off	On: The FB is activated. Off: The FB is not activated.
(2)	i_stModule	Module label	Structure	The setting range differs depending on the module label.	Specify the module label of the MELSEC iQ-R positioning module.
(3)	i_uPrecedingAxis	Preceding axis	Word [unsigned]	1 to 4	Specify the number of an axis preceding the other axis. The setting range differs depending on the module used.
(4)	i_uFollowingAxis	Following axis	Word [unsigned]	1 to 4	Specify the number of an axis to be started following the other axis. The setting range differs depending on the module used.
(5)	i_uStartBlock	Start block	Word [unsigned]	0 to 4	Specify a start block. 0: Start block 0 1: Start block 1 2: Start block 2 3: Start block 3 4: Start block 4
(6)	i_uPoint	Point	Word [unsigned]	1 to 50	Specify a point number.
(7)	i_bShape	Da.11: Shape	Bit	Off: Complete On: Continue	Set a shape.
(8)	i_uStartDataNo	Da.12: Start data No.	Word [unsigned]	1 to 600	Set a "positioning data No." to be specified in the "block start data".
(9)	i_uParameter	Da.14: Parameter (Condition data No.)	Word [unsigned]	1 to 10	Set a condition data No.

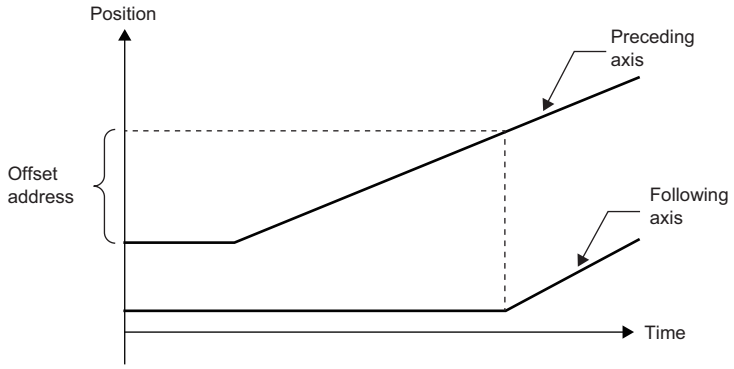
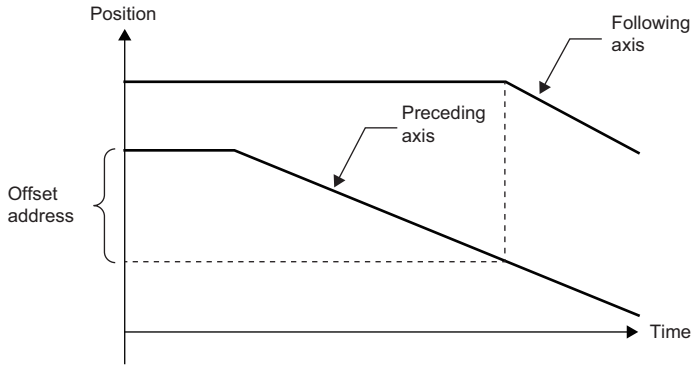
No.	Variable name	Name	Data type	Range	Description
(10)	i_dOffsetAddress	Offset address	Double word [signed]	-2147483648 to 2147483647 (When Pr.1: Unit setting of the preceding axis is set to 2: degree, the range is -35999999 to 35999999.)	Specify an offset movement amount at start timing.

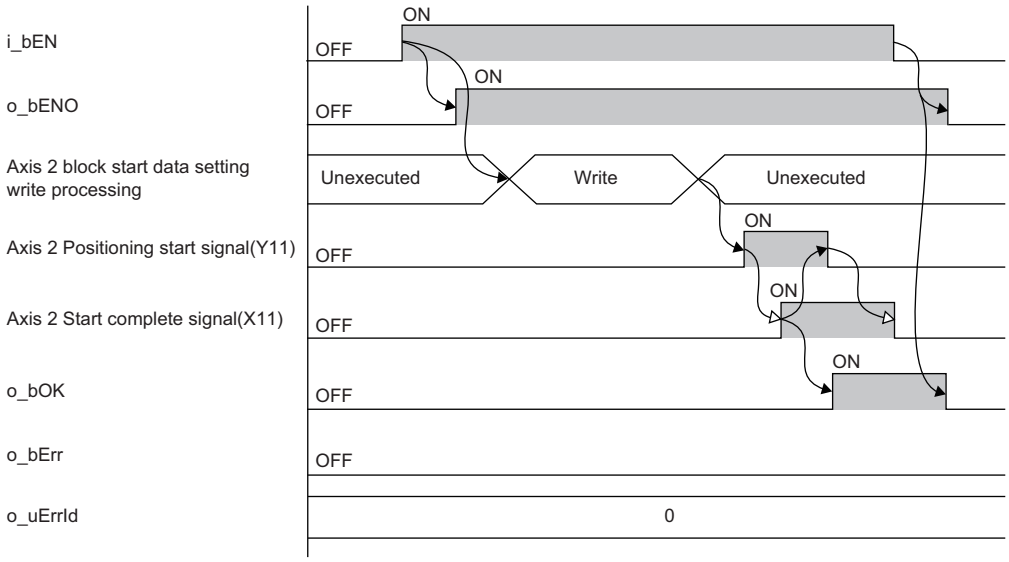
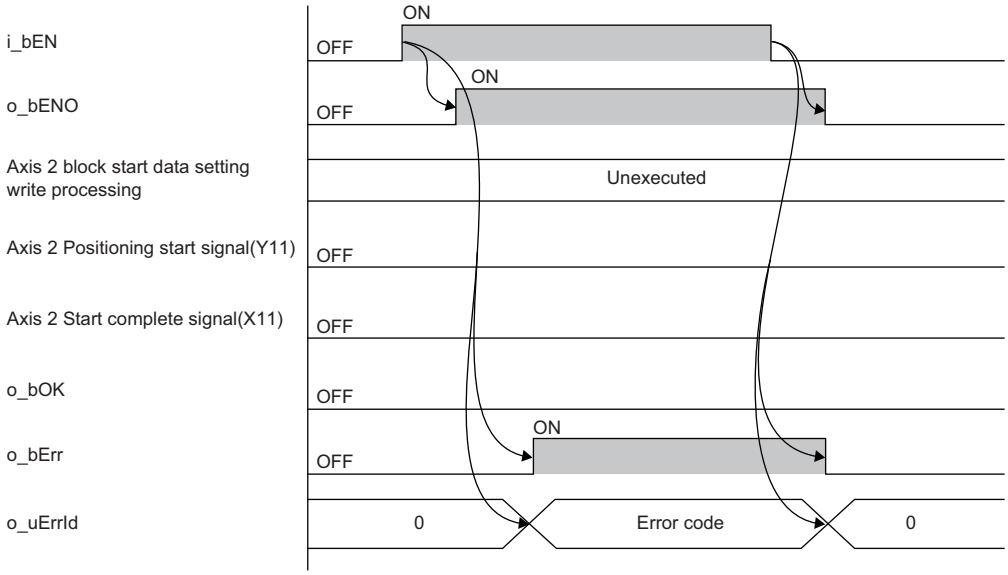
■Output label

No.	Variable name	Name	Data type	Default value	Description
(11)	o_bENO	Execution status	Bit	Off	On: The execution command is on. Off: The execution command is off.
(12)	o_bOK	Normal completion	Bit	Off	When this label is on, it indicates that the block start of the axis which is started following the preceding axis is completed. However, this label does not turn on when a module error occurs at the start.
(13)	o_bErr	Error completion	Bit	Off	When this label is on, it indicates that an error has occurred in the FB.
(14)	o_uErrId	Error code	Word [unsigned]	0	Stores the abnormal code generated in the FB.

FB details

Item	Description	
Available device	Target module	RD75P2, RD75P4, RD75D2, RD75D4
	CPU module	MELSEC iQ-R series CPU modules
	Engineering tool	GX Works3
Language	Ladder diagram	
Number of basic steps	870 steps The number of steps of the FB embedded in a program depends on the CPU module used, the input/output definitions, and the options setting of GX Works3. For the options setting of GX Works3, refer to the GX Works3 Operating Manual.	

Item	Description
Processing	• By turning on i_bEN (Execution command), this FB starts the setting for starting the following axis after the preceding axis has moved for the specified movement amount. This FB does not start positioning operation of the preceding axis. Check that o_bOK (Normal completion) of this FB has turned on, and start operation of the preceding axis with the program used. [When the offset address is a positive value]  [When the offset address is a negative value]  • Only when the following axis satisfies all of the following conditions, the axis operates by turning on i_bEN (Execution command). If the axis does not satisfy any of the conditions, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 200 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes. [Condition] RD75 READY signal (X0): On Positioning start signal (Y10, Y11, Y12, Y13): Off Start complete signal (X10, X11, X12, X13): Off BUSY signal (XC, XD, XE, XF): Off • If the setting value of i_uPrecedingAxis (Preceding axis) is out of the setting range, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 103 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes. • If the setting value of i_uFollowingAxis (Following axis) is out of the setting range, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 104 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes. • If the same axis number is specified for both of i_uPrecedingAxis (Preceding axis) and i_uFollowingAxis (Following axis), o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 105 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes. • If the setting value of i_uStartBlock (Start block) is out of the setting range, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 106 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes. • If the setting value of i_uPoint (Point) is out of the setting range, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 107 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes. • If the setting value of i_uStartDataNo (Da.12: Start data No.) is out of the setting range, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 108 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes. • If the setting value of i_uParameter (Condition data No.) is out of the setting range, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 109 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes. • If the setting value of i_dOffsetAddress (Offset address) is out of the setting range (only when Pr.1: Unit setting of the preceding axis is set to 2: degree), or the sum of the current feed value of the preceding axis and the offset address is out of the setting range, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 10A (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes.
FB compilation method	Macro type
FB operation	Pulse execution (multiple scan execution type)

Item	Description
Timing chart of I/O signals	■When the operation is completed successfully (Preceding axis: Axis 1, Following axis: Axis 2)  ■When the operation is completed with an error (Preceding axis: Axis 1, Following axis: Axis 2) 
Restrictions or precautions	• This FB does not include the error recovery processing. Program the error recovery processing separately in accordance with the required system operation. • This FB cannot be used in an interrupt program. • Do not use this FB in programs that are executed only once, such as a subroutine program or FOR-NEXT loop, because i_bEN (Execution command) cannot be turned off and the normal operation cannot be acquired. Always use this FB in programs that can turn off i_bEN (Execution command). • Do not operate the preceding axis in the direction opposite to that set in i_dOffsetAddress (Offset address) after execution of this FB. • If the sum of the current feed value of the preceding axis and i_dOffsetAddress (Offset address) is close to either of the following values, the following axis may not start even if the preceding axis has moved for a movement amount specified in i_dOffsetAddress (Offset address). Set i_dOffsetAddress (Offset address) so that the sum of the current feed value of the preceding axis and i_dOffsetAddress (Offset address) will not be close to either of the following values. -2147483648 or 2147483647 (When Pr.1: Unit setting of the preceding axis is set to 2: degree, the value is 0 or 35999999.) • When 0 is set in i_dOffsetAddress (Offset address), the following axis starts to operate immediately after the preceding axis starts, regardless of the operation direction of the preceding axis. (Their operation start timings are different and the following axis starts later.) • This FB requires the configuration of the ladder for every input label. • To operate the RD75, the logics of the pulse output mode and external I/O signals are required to be set according to each device and system connected. Set the module parameter of GX Works3 according to the application. For the setting method of the module parameter, refer to MELSEC iQ-R Positioning Module User's Manual (Application).

Error code

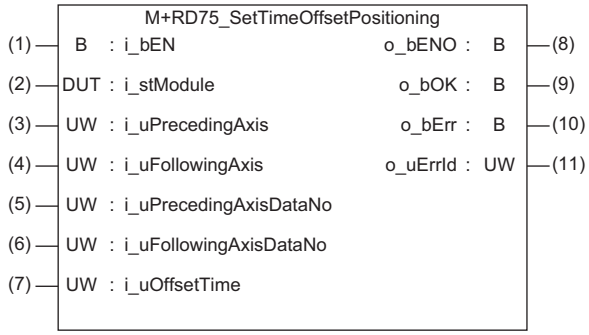
Error code	Description	Action
103H	The set value of i_uPrecedingAxis (Preceding axis) is out of the range. The preceding axis is not within the range of 1 to 4.	Try again after checking the setting.
104H	The set value of i_uFollowingAxis (Following axis) is out of the range. The following axis is not within the range of 1 to 4.	Try again after checking the setting.
105H	The set values of i_uPrecedingAxis (Preceding axis) and i_uFollowingAxis (Following axis) are the same.	Try again after checking the setting.
106H	The set value of i_uStartBlock (Start block) is out of the range. The start block is not within the range of 0 to 4.	Try again after checking the setting.
107H	The set value of i_uPoint (Point) is out of the range. The point number is not within the range of 1 to 50.	Try again after checking the setting.
108H	The set value of i_uStartDataNo (Da.12: Start data No.) is out of the range. The start data No. is not within the range of 1 to 600.	Try again after checking the setting.
109H	The set value of i_uParameter (Condition data No.) is out of the range. The condition data No. is not within the range of 1 to 10.	Try again after checking the setting.
10AH	The set value of i_dOffsetAddress (Offset address) is out of the range. The sum of the current feed value of the preceding axis and the offset address is not within the range of -2147483648 to 2147483647. (When Pr.1: Unit setting of the preceding axis is set to 2: degree, the sum is not within the range of 0 to 35999999.)	Try again after checking the setting.
200H	The conditions for positioning start are not satisfied. Any of the following conditions is not satisfied. • RD75 READY signal: On • Positioning start signal: Off • Start complete signal: Off • BUSY signal: Off	Execute the FB again when all of the following conditions are satisfied. • RD75 READY signal: On • Positioning start signal: Off • Start complete signal: Off • BUSY signal: Off

2.14 M+RD75_SetTimeOffsetPositioning

Name

M+RD75_SetTimeOffsetPositioning

Overview

Item	Description
Overview	Starts one of the axes after the other axis has started and a specified time has elapsed.
Symbol	

Labels

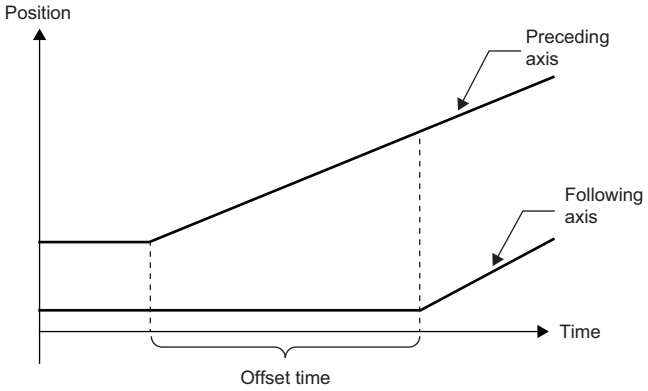
■Input label

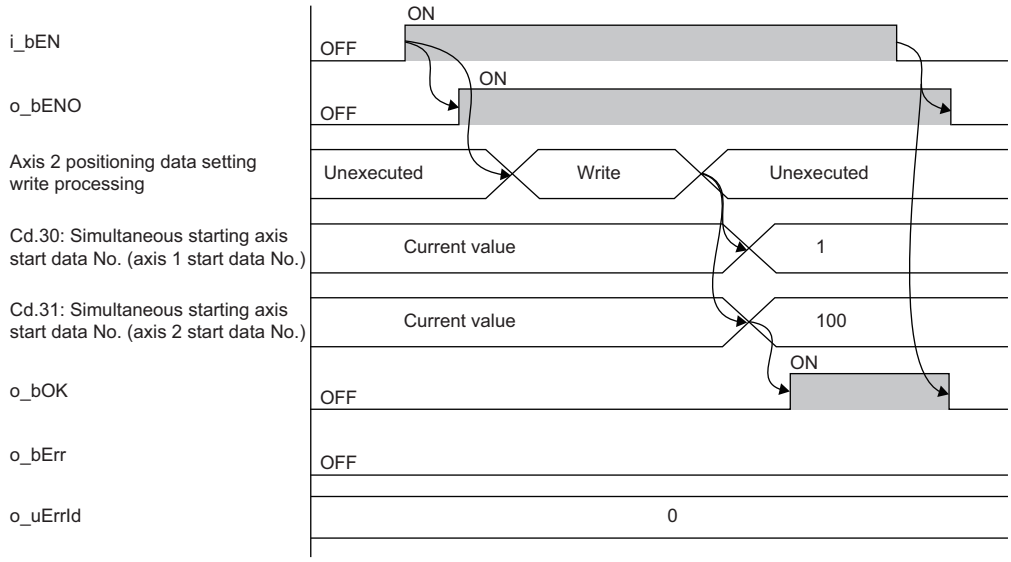
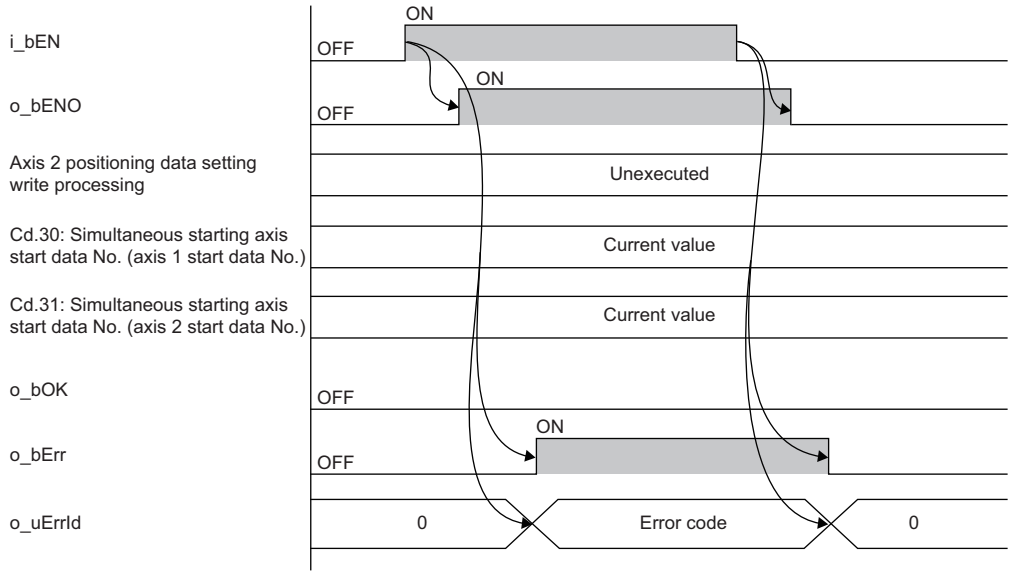
No.	Variable name	Name	Data type	Range	Description
(1)	i_bEN	Execution command	Bit	On or off	On: The FB is activated. Off: The FB is not activated.
(2)	i_stModule	Module label	Structure	The setting range differs depending on the module label.	Specify the module label of the MELSEC iQ-R positioning module.
(3)	i_uPrecedingAxis	Preceding axis	Word [unsigned]	1 to 4	Specify the number of an axis preceding the other axis. The setting range differs depending on the module used.
(4)	i_uFollowingAxis	Following axis	Word [unsigned]	1 to 4	Specify the number of an axis to be started following the other axis. The setting range differs depending on the module used.
(5)	i_uPrecedingAxisDataNo	Preceding axis positioning data No.	Word [unsigned]	1 to 600	Set the positioning data No. for the axis preceding the other axis.
(6)	i_uFollowingAxisDataNo	Following axis positioning data No.	Word [unsigned]	1 to 600	Set the positioning data No. for the axis which is operated following the other axis.
(7)	i_uOffsetTime	Offset time	Word [unsigned]	0 to 65535 (ms)	Specify an offset time (ms) of start timing.

■Output label

No.	Variable name	Name	Data type	Default value	Description
(8)	o_bENO	Execution status	Bit	Off	On: The execution command is on. Off: The execution command is off.
(9)	o_bOK	Normal completion	Bit	Off	When this label is on, it indicates that the positioning data setting has been completed.
(10)	o_bErr	Error completion	Bit	Off	When this label is on, it indicates that an error has occurred in the FB.
(11)	o_uErrId	Error code	Word [unsigned]	0	Stores the abnormal code generated in the FB.

FB details

Item	Description	
Available device	Target module	RD75P2, RD75P4, RD75D2, RD75D4
	CPU module	MELSEC iQ-R series CPU modules
	Engineering tool	GX Works3
Language	Ladder diagram	
Number of basic steps	370 steps The number of steps of the FB embedded in a program depends on the CPU module used, the input/output definitions, and the options setting of GX Works3. For the options setting of GX Works3, refer to the GX Works3 Operating Manual.	
Processing	• By turning on i_bEN (Execution command), this FB starts the setting for starting the following axis after the preceding axis has moved and a set time has elapsed. This FB does not start positioning operation. Check that o_bOK (Normal completion) of this FB has turned on, set 9004 (Multiple axes simultaneous start) in Cd.3: Positioning start No. of the preceding axis and start operation with the program used.  • After execution of this FB, do not change the positioning data with the positioning data No. one prior to the No. of the following axis since the FB uses that data. (When 1 is set as the following axis positioning data No., the data this FB uses is the positioning data with No. 600.) • If the setting value of i_uPrecedingAxis (Preceding axis) is out of the setting range, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 103 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes. • If the setting value of i_uFollowingAxis (Following axis) is out of the setting range, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 104 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes. • If the same axis number is specified for both of i_uPrecedingAxis (Preceding axis) and i_uFollowingAxis (Following axis), o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 105 (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes. • If the setting value of i_uPrecedingAxisDataNo (Preceding axis positioning data No.) is out of the setting range, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 10B (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes. • If the setting value of i_uFollowingAxisDataNo (Following axis positioning data No.) is out of the setting range, o_bErr (Error completion) turns on and the processing of this FB is interrupted. In addition, the error code 10C (hexadecimal) is stored in o_uErrId (Error code). For the error code, refer to the list of error codes.	
FB compilation method	Macro type	
FB operation	Pulse execution (single scan execution type)	

Item	Description
Timing chart of I/O signals	■When the operation is completed successfully (Preceding axis: Axis 1, Preceding axis positioning data No.: 1, Following axis: Axis 2, Following axis positioning data No.: 100)  ■When the operation is completed with an error (Preceding axis: Axis 1, Preceding axis positioning data No.: 1, Following axis: Axis 2, Following axis positioning data No.: 100) 
Restrictions or precautions	• This FB does not include the error recovery processing. Program the error recovery processing separately in accordance with the required system operation. • This FB cannot be used in an interrupt program. • Do not use this FB in programs that are executed only once, such as a subroutine program or FOR-NEXT loop, because i_bEN (Execution command) cannot be turned off and the normal operation cannot be acquired. Always use this FB in programs that can turn off i_bEN (Execution command). • When 0 is set in i_uOffsetTime (Offset time), the following axis starts to operate immediately after the preceding axis starts. (Their operation start timings are different and the following axis starts later.) • This FB requires the configuration of the ladder for every input label. • To operate the RD75, the logics of the pulse output mode and external I/O signals are required to be set according to each device and system connected. Set the module parameter of GX Works3 according to the application. For the setting method of the module parameter, refer to MELSEC iQ-R Positioning Module User's Manual (Application).

Error code

Error code	Description	Action
103H	The set value of i_uPrecedingAxis (Preceding axis) is out of the range. The preceding axis is not within the range of 1 to 4.	Try again after checking the setting.
104H	The set value of i_uFollowingAxis (Following axis) is out of the range. The following axis is not within the range of 1 to 4.	Try again after checking the setting.
105H	The set values of i_uPrecedingAxis (Preceding axis) and i_uFollowingAxis (Following axis) are the same.	Try again after checking the setting.
10BH	The set value of i_uPrecedingAxisDataNo (Preceding axis positioning data No.) is out of the range. The preceding axis positioning data No. is not within the range of 1 to 600.	Try again after checking the setting.
10CH	The set value of i_uFollowingAxisDataNo (Following axis positioning data No.) is out of the range. The following axis positioning data No. is not within the range of 1 to 600.	Try again after checking the setting.

INSTRUCTION INDEX

M

MEMO

REVISIONS

*The manual number is given on the bottom left of the back cover.

Revision date	*Manual number	Description
June 2014	BCN-P5999-0377-A	First edition
January 2015	BCN-P5999-0377-B	■Added or modified parts Chapter 1, Section 2.11
April 2016	BCN-P5999-0377-C	■Added or modified parts Section 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.10, 2.11, 2.12
April 2017	BCN-P5999-0377-D	■Additional FBs M+RD75_StartAddressOffsetPositioning, M+RD75_SetTimeOffsetPositioning ■Added or modified parts Chapter 1, Section 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.10, 2.11, 2.12, 2.13, 2.14
June 2020	BCN-P5999-0377-E	■Added or modified parts Section 2.1, 2.2, 2.5, 2.7, 2.14

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