

Precautions When Local Labels are Added into the MELSEC iQ-R Series Function Blocks

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■Relevant Models

R04CPU, R08CPU, R16CPU, R32CPU, R120CPU, R04ENCPU, R08ENCPU, R16ENCPU, R32ENCPU, R120ENCPU, R08SFPCPU-SET, R16SFPCPU-SET, R32SFPCPU-SET, R120SFPCPU-SET, R08PCPU, R16PCPU, R32PCPU, R120PCPU, R08PSFPCPU-SET, R16PSFPCPU-SET, R32PSFPCPU-SET, R120PSFPCPU-SET

Thank you for your continued support of Mitsubishi Electric programmable controllers, MELSEC iQ-R series. We will inform you of precautions when local labels are added into function blocks in the MELSEC iQ-R series CPU module.

1 PRECAUTIONS WHEN LOCAL LABELS ARE ADDED INTO FUNCTION BLOCKS

Each function block has following reserved areas for adding local labels.

Label type	Reserved area capacity ^{*1}
Local label	48 words
Local latch label	16 words

*1 For the methods of calculating the required reserved area capacity for adding local labels into a function block, refer to the following.

☞ Page 2 METHODS OF CALCULATING THE REQUIRED RESERVED AREA CAPACITY

When local labels are added in the CPU module in RUN state, the added local labels are assigned to this reserved areas.

Therefore, local labels with a size exceeding the reserved area capacity of a function block cannot be added.

When adding local labels with a size exceeding the reserved area capacity, perform "Rebuild All" (reassignment) in GX

Works3, switch the operating status of the CPU module to STOP, and then write the data. (☞ Page 2 CORRECTIVE

ACTIONS WHEN LOCAL LABELS WITH A SIZE EXCEEDING THE RESERVED AREA CAPACITY ARE ADDED)

If such local labels are added, a conversion error that indicates a lack of the reserved area capacity occurs. In that case, follow the precautions above and take corrective actions.

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The same applies to the case where local labels are modified.

In the case where local labels are added into program blocks, however, these precautions are not applicable.

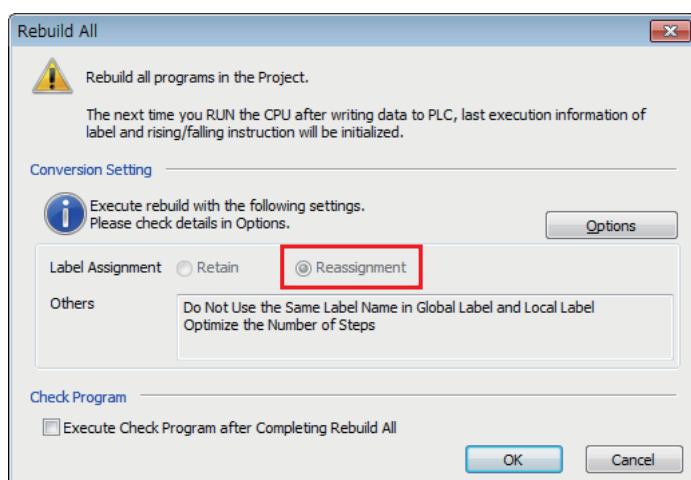
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2 CORRECTIVE ACTIONS WHEN LOCAL LABELS WITH A SIZE EXCEEDING THE RESERVED AREA CAPACITY ARE ADDED

When adding local labels with a size exceeding the reserved area capacity of a function block, perform "Rebuild All" (reassignment) following the procedure described below. The reserved area capacity is restored by performing "Rebuild All" (reassignment).

1. Switch the operating status of the CPU module to STOP and write the rebuild (reassigned) programs.
2. Clear the current values of label data.

When performing "Rebuild All" (reassignment), set "Label Assignment" to "Reassignment" in the "Rebuild All" window.



3 METHODS OF CALCULATING THE REQUIRED RESERVED AREA CAPACITY

The required reserved area capacity can be calculated according to the method of memory assignment of labels in GX Works3.

For the memory assignment of labels, refer to the following.

GX Works3 Operating Manual (SH-081215ENG)

For the label capacity that the function blocks offered by Mitsubishi Electric require, refer to the following.

Page 3 LABEL CAPACITY THAT A FUNCTION BLOCK REQUIRES

The calculation method for user-defined function blocks is the same as above.

When newly adding a function block into another function block, consider the reserved area capacity that the function block to be added requires.*1

*1 For GX Works3 with version 1.036N or earlier, a function block with more than 48 words of label size and more than 16 words of latch label size cannot be added into another function block when the CPU module is in RUN state. For GX Works3 with version 1.038Q or later, the reserved area capacity can be set for each function block definition. For the setting of the reserved area capacity, refer to the following.

GX Works3 Operating Manual (SH-081215ENG)

4 LABEL CAPACITY THAT A FUNCTION BLOCK REQUIRES

The label capacity that the FB requires depends on the GX Works3 version used to add/change the FB. After updating the FB version, all conversion (re-assignment) may be required.

To check the FB version information, refer to the following.

 MELSEC iQ-R Programming Manual (Process Control Function Blocks/Instructions) (SH-081749ENG)

In the following table, for the FB whose label capacity differs depending on the version, the label capacity to be required is listed for each version.

Classification	Function block name	Subroutine type		Macro type	
		Label (Word)	Latch label (Word)	Label (Word)	Latch label (Word)
Standard function block (edge detection)	R_TRIG	4	0	-	-
	R_TRIG_E	4	0	-	-
	F_TRIG	4	0	-	-
	F_TRIG_E	4	0	-	-
Standard function block (counter)	CTU	4	0	-	-
	CTU_E	4	0	-	-
	CTD	4	0	-	-
	CTD_E	4	0	-	-
	CTUD	4	0	-	-
	CTUD_E	4	0	-	-
	COUNTER_FB_M	8	0	-	-
Standard function block (timer)	TON	28	0	-	-
	TON_E	28	0	-	-
	TOF	28	0	-	-
	TOF_E	28	0	-	-
	TP	28	0	-	-
	TP_E	28	0	-	-
	TIMER_10_FB_M	8	0	-	-
	TIMER_100_FB_M	8	0	-	-
	TIMER_HIGH_FB_M	8	0	-	-
	TIMER_LOW_FB_M	8	0	-	-
	TIMER_CONT_FB_M	8	0	-	-
	TIMER_CONTHFB_M	8	0	-	-
Standard function block (bistable)	SR	4	0	-	-
	SR_E	4	0	-	-
	RS	4	0	-	-
	RS_E	4	0	-	-
Standard function block (analog value selection/average)	M+P_HS	72	4	-	-
	M+P_HS_E	72	4	-	-
	M+P_LS	72	4	-	-
	M+P_LS_E	72	4	-	-
	M+P_MID	72	4	-	-
	M+P_MID_E	72	4	-	-
	M+P_AVE	68	4	-	-
	M+P_AVE_E	68	4	-	-
	M+P_ABS	8	4	-	-
	M+P_ABS_E	8	4	-	-

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Classification	Function block name	Subroutine type		Macro type	
		Label (Word)	Latch label (Word)	Label (Word)	Latch label (Word)
Standard function block (correction operation)	M+P_FG	4	196	-	-
	M+P_IFG	4	196	-	-
	M+P_FLT	12	112	-	-
	M+P_ENG	8	8	-	-
	M+P_IENG	8	8	-	-
	M+P_TPC	24	12	-	-
	M+P_SUM	12	8	-	-
	M+P_SUM2_	36	16	-	-
	M+P_RANGE_	32	12	-	-
Standard function block (arithmetic operation)	M+P_ADD	36	16	-	-
	M+P_SUB	36	16	-	-
	M+P_MUL	36	16	-	-
	M+P_DIV	24	16	-	-
	M+P_SQR	8	8	-	-
Standard function block (comparison operation)	M+P_GT	20	8	-	-
	M+P_LT	20	8	-	-
	M+P_EQ	16	8	-	-
	M+P_GE	20	8	-	-
	M+P_LE	20	8	-	-
Standard function block (control operation)	M+P_LLAG	12	8	-	-
	M+P_I	12	8	-	-
	M+P_D	12	8	-	-
	M+P_DED	24	108	-	-
	M+P_LIMT	16	12	-	-
	M+P_VLMT1	16	12	-	-
	M+P_VLMT2	16	12	-	-
	M+P_DBND	12	8	-	-
	M+P_BUMP	16	12	-	-
	M+P_AMR	20	8	-	-
M+P_DUTY_8PT_	84	36	-	-	
Tag access FB (I/O control)	M+P_IN	28	Earlier than 1.070Y: 16 1.070Y or later: 20	-	-
	M+P_OUT1	12	12	-	-
	M+P_OUT2	12	12	-	-
	M+P_OUT3_	76	32	-	-
	M+P_MOUT	8	8	-	-
	M+P_DUTY	8	8	-	-
	M+P_PSUM	20	12	-	-
	M+P_BC	8	4	-	-
M+P_MSET_	60	12	-	-	

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Classification	Function block name	Subroutine type		Macro type	
		Label (Word)	Latch label (Word)	Label (Word)	Latch label (Word)
Tag access FB (loop control operation)	M+P_R_T	8	4	-	-
	M+P_R	8	4	-	-
	M+P_PID_T	20	40	-	-
	M+P_PID	20	36	-	-
	M+P_2PID_T	20	40	-	-
	M+P_2PID	20	36	-	-
	M+P_2PIDH_T_	112	44	-	-
	M+P_2PIDH_	112	44	-	-
	M+P_PIDP_T	20	20	-	-
	M+P_PIDP	20	16	-	-
	M+P_PIDP_EX_T_	20	20	-	-
	M+P_PIDP_EX_	20	20	-	-
	M+P_SPI_T	16	8	-	-
	M+P_SPI	16	8	-	-
	M+P_IPD_T	16	12	-	-
	M+P_IPD	16	8	-	-
	M+P_BPI_T	16	8	-	-
	M+P_BPI	16	8	-	-
	M+P_PHPL	12	4	-	-
	M+P_ONF2_T	12	8	-	-
	M+P_ONF2	12	8	-	-
	M+P_ONF3_T	12	8	-	-
	M+P_ONF3	12	8	-	-
	M+P_PGS	4	4	-	-
	M+P_PGS2_	96	20	-	-
	M+P_SEL	16	8	-	-
	M+P_SEL_T1	16	12	-	-
	M+P_SEL_T2	16	12	-	-
	M+P_SEL_T3_	40	12	-	-
	Tag access FB (special)	M+P_MCHG	8	Earlier than 1.070Y: 0 1.070Y or later: 4	-
M+P_MCHGPRMRY		8	4	-	-

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Classification	Function block name	Subroutine type		Macro type	
		Label (Word)	Latch label (Word)	Label (Word)	Latch label (Word)
Tag FB (loop tag)	M+M_PID_T	Earlier than 1.070Y: 88 1.070Y or later: 96	Earlier than 1.070Y: 108 1.070Y or later: 120	-	-
	M+M_PID	88	Earlier than 1.070Y: 104 1.070Y or later: 112	-	-
	M+M_PID_DUTY_T	Earlier than 1.070Y: 84 1.070Y or later: 92	Earlier than 1.070Y: 96 1.070Y or later: 108	-	-
	M+M_PID_DUTY	84	Earlier than 1.070Y: 92 1.070Y or later: 100	-	-
	M+M_2PID_T	Earlier than 1.070Y: 88 1.070Y or later: 96	Earlier than 1.070Y: 108 1.070Y or later: 120	-	-
	M+M_2PID	88	Earlier than 1.070Y: 104 1.070Y or later: 112	-	-
	M+M_2PID_DUTY_T	Earlier than 1.070Y: 84 1.070Y or later: 92	Earlier than 1.070Y: 96 1.070Y or later: 108	-	-
	M+M_2PID_DUTY	84	Earlier than 1.070Y: 92 1.070Y or later: 100	-	-
	M+M_2PIDH_T_	Earlier than 1.070Y: 340 1.070Y or later: 348	Earlier than 1.070Y: 608 1.070Y or later: 624	-	-
	M+M_2PIDH_	340	Earlier than 1.070Y: 608 1.070Y or later: 620	-	-
	M+M_PIDP_T	Earlier than 1.070Y: 76 1.070Y or later: 84	Earlier than 1.070Y: 72 1.070Y or later: 88	-	-
	M+M_PIDP	76	Earlier than 1.070Y: 68 1.070Y or later: 80	-	-
	M+M_PIDP_EX_T_	Earlier than 1.070Y: 76 1.070Y or later: 84	Earlier than 1.070Y: 76 1.070Y or later: 88	-	-
	M+M_PIDP_EX_	76	Earlier than 1.070Y: 76 1.070Y or later: 84	-	-
	M+M_SPI_T	Earlier than 1.070Y: 84 1.070Y or later: 92	Earlier than 1.070Y: 72 1.070Y or later: 88	-	-
	M+M_SPI	84	Earlier than 1.070Y: 72 1.070Y or later: 84	-	-
	M+M_IPD_T	Earlier than 1.070Y: 84 1.070Y or later: 92	Earlier than 1.070Y: 80 1.070Y or later: 92	-	-
	M+M_IPD	84	Earlier than 1.070Y: 76 1.070Y or later: 84	-	-

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Classification	Function block name	Subroutine type		Macro type	
		Label (Word)	Latch label (Word)	Label (Word)	Latch label (Word)
Tag FB (loop tag)	M+M_BPI_T	Earlier than 1.070Y: 84 1.070Y or later: 92	Earlier than 1.070Y: 72 1.070Y or later: 88	-	-
	M+M_BPI	84	Earlier than 1.070Y: 72 1.070Y or later: 84	-	-
	M+M_R_T	Earlier than 1.070Y: 76 1.070Y or later: 84	Earlier than 1.070Y: 64 1.070Y or later: 80	-	-
	M+M_R	76	Earlier than 1.070Y: 64 1.070Y or later: 72	-	-
	M+M_ONF2_T	Earlier than 1.070Y: 68 1.070Y or later: 76	Earlier than 1.070Y: 52 1.070Y or later: 64	-	-
	M+M_ONF2	68	Earlier than 1.070Y: 52 1.070Y or later: 60	-	-
	M+M_ONF3_T	Earlier than 1.070Y: 68 1.070Y or later: 76	Earlier than 1.070Y: 52 1.070Y or later: 64	-	-
	M+M_ONF3	68	Earlier than 1.070Y: 52 1.070Y or later: 60	-	-
	M+M_MONI	44	Earlier than 1.070Y: 36 1.070Y or later: 40	-	-
	M+M_MWM	60	Earlier than 1.070Y: 52 1.070Y or later: 60	-	-
	M+M_BC	32	24	-	-
	M+M_PSUM	24	24	-	-
	M+M_SEL	32	Earlier than 1.070Y: 20 1.070Y or later: 24	-	-
	M+M_SEL_T1	Earlier than 1.070Y: 32 1.070Y or later: 40	Earlier than 1.070Y: 24 1.070Y or later: 32	-	-
	M+M_SEL_T2	Earlier than 1.070Y: 32 1.070Y or later: 48	Earlier than 1.070Y: 24 1.070Y or later: 36	-	-
	M+M_SEL_T3_	Earlier than 1.070Y: 56 1.070Y or later: 72	Earlier than 1.070Y: 24 1.070Y or later: 36	-	-
	M+M_MOUT	20	Earlier than 1.070Y: 16 1.070Y or later: 24	-	-
	M+M_PGS	16	Earlier than 1.070Y: 12 1.070Y or later: 16	-	-
	M+M_PGS2_	112	Earlier than 1.070Y: 32 1.070Y or later: 36	-	-
	M+M_SWM_	116	Earlier than 1.070Y: 56 1.070Y or later: 68	-	-
M+M_PVAL_T_	Earlier than 1.070Y: 100 1.070Y or later: 108	Earlier than 1.070Y: 56 1.070Y or later: 72	-	-	
M+M_HTCL_T_	Earlier than 1.070Y: 80 1.070Y or later: 88	Earlier than 1.070Y: 28 1.070Y or later: 36	-	-	

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Classification	Function block name	Subroutine type		Macro type	
		Label (Word)	Latch label (Word)	Label (Word)	Latch label (Word)
Tag FB (status tag)	M+M_NREV	20	Earlier than 1.070Y: 12 1.070Y or later: 16	-	-
	M+M_REV	20	Earlier than 1.070Y: 16 1.070Y or later: 20	-	-
	M+M_MVAL1	20	Earlier than 1.070Y: 12 1.070Y or later: 16	-	-
	M+M_MVAL2	20	Earlier than 1.070Y: 16 1.070Y or later: 20	-	-
	M+M_TIMER1	12	8	-	-
	M+M_TIMER2	12	8	-	-
	M+M_COUNTER1	8	4	-	-
	M+M_COUNTER2	8	4	-	-
	M+M_PB_	16	Earlier than 1.070Y: 12 1.070Y or later: 16	-	-
Tag FB (alarm tag)	M+M_ALARM	4	0	-	-
	M+M_ALARM_64PT_	8	0	-	-
Tag FB (message tag)	M+M_MESSAGE	4	0	-	-
	M+M_MESSAGE_64PT_	8	0	-	-
Module FB (RCPU)	M+RCPU_Msynchronization_Delay1OUT_00A	-	-	4	0
	M+RCPU_Msynchronization_Delay2OUT_00A	-	-	4	0
	M+RCPU_Msynchronization_Delay1SET_00A	-	-	4	0
	M+RCPU_Msynchronization_Delay2SET_00A	-	-	4	0
	M+RCPU_Msynchronization_Delay1RST_00A	-	-	4	0
	M+RCPU_Msynchronization_Delay2RST_00A	-	-	4	0
	M+RCPU_Msynchronization_Delay1MOV_00A	-	-	8	0
	M+RCPU_Msynchronization_Delay2MOV_00A	-	-	8	0
	M+RCPU_Msynchronization_Delay1DMOV_00A	-	-	12	0
	M+RCPU_Msynchronization_Delay2DMOV_00A	-	-	12	0
	M+RCPU_ConnectionOpen_00C	-	-	24	0
	M+RCPU_ConnectionClose_00B	-	-	8	0
	M+RCPU_Send_Socket_00B	-	-	8	0
	M+RCPU_Recv_Socket_01A	-	-	8	0
	M+RCPU_SLMP_DeviceRead_IP_05C	-	-	1056	0
M+RCPU_SLMP_DeviceWrite_IP_05C	-	-	1056	0	
Module FB (R60AD4, R60ADV8, R60AD18)	M+R60AD_OperateError_00A	-	-	4	0
	M+R60AD_RequestSetting_00A	-	-	4	0
	M+R60AD_SetLoggingPARAM_00A	-	-	16	0
	M+R60AD_SaveLogging_01A	-	-	216	0
Module FB (R60AD8-G, R60AD16-G)	M+R60ADG_OperateError_00C	-	-	4	0
	M+R60ADG_RequestSetting_00C	-	-	4	0
	M+R60ADG_SetLoggingParam_00C	-	-	16	0
	M+R60ADG_SaveLogging_01A	-	-	216	0
Module FB (R60ADH4)	M+R60ADH_RequestSetting_00A	-	-	4	0
	M+R60ADH_OperateError_00A	-	-	4	0
	M+R60ADH_SetLoggingPARAM_00A	-	-	16	0
	M+R60ADH_SaveLogging_00A	-	-	220	0
	M+R60ADH_SetContinuousLoggingParam_00A	-	-	4	0
	M+R60ADH_ContinuousLoggingRequest_00A	-	-	4	0
	M+R60ADH_ReadContinuousLogging_00A	-	-	24	0

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Classification	Function block name	Subroutine type		Macro type	
		Label (Word)	Latch label (Word)	Label (Word)	Latch label (Word)
Module FB (R60DA4, R60DAV8, R60DAI8)	M+R60DA_OperateError_00A	-	-	4	0
	M+R60DA_RequestSetting_00A	-	-	4	0
	M+R60DA_WaveOutputSetting_00B	-	-	20	0
	M+R60DA_WaveDataStoreCsv_00B	-	-	212	0
	M+R60DA_WaveDataStoreDev_00B	-	-	32	0
	M+R60DA_WaveOutputReqSetting_00A	-	-	16	0
Module FB (R60DA8-G)	M+R60DAG_RequestSetting_00C	-	-	4	0
	M+R60DAG_OperateError_00C	-	-	4	0
Module FB (R60DA16-G)	M+R60DAG16_RequestSetting_00C	-	-	4	0
	M+R60DAG16_OperateError_00C	-	-	4	0
Module FB (R60DAH4)	M+R60DAH_OperateError_00A	-	-	4	0
	M+R60DAH_RequestSetting_00A	-	-	4	0
	M+R60DAH_WaveOutputSetting_00A	-	-	16	0
	M+R60DAH_WaveDataStoreCsv_00A	-	-	212	0
	M+R60DAH_WaveDataStoreDev_00A	-	-	32	0
	M+R60DAH_WaveOutputReqSetting_00A	-	-	12	0
Module FB (R60RD8-G)	M+R60RDG_OperateError_00B	-	-	4	0
	M+R60RDG_RequestSetting_00B	-	-	4	0
	M+R60RDG_SetLoggingPARAM_00B	-	-	12	0
	M+R60RDG_SaveLogging_01A	-	-	216	0
Module FB (R60TD8-G)	M+R60TDG_OperateError_00B	-	-	4	0
	M+R60TDG_RequestSetting_00B	-	-	4	0
	M+R60TDG_SetLoggingPARAM_00B	-	-	12	0
	M+R60TDG_SaveLogging_01A	-	-	216	0
Module FB (R60TCRT2TT2, R60TCRT4)	M+R60TC_StartPeakCurrentSuppressionBetweenModule_00B	-	-	8	0
	M+R60TC_StartSimultaneousTemperatureRiseBetweenModule_00B	-	-	8	0
	M+R60TC_OperateError_00C	-	-	4	0
Module FB (R60TCBW, R60TCRT2TT2BW, R60TCRT4BW)	M+R60TCBW_StartPeakCurrentSuppressionBetweenModule_00B	-	-	8	0
	M+R60TCBW_StartSimultaneousTemperatureRiseBetweenModule_00B	-	-	8	0
	M+R60TCBW_OperateError_00C	-	-	4	0
Module FB (RD40PD01)	M+RD40PD01_SaveSamplingData_00A	-	-	24548	0
Module FB (RD62P2, RD62D2, RD62P2E)	M+RD62_SetRingCounter_00A	-	-	8	0
	M+RD62_CountEnable_00A	-	-	4	0
	M+RD62_SetCoincidenceOutput_00A	-	-	8	0
	M+RD62_CoincidenceOutputEnable_00A	-	-	4	0
	M+RD62_PresetOperation_00A	-	-	8	0
	M+RD62_CountDisableOperation_00A	-	-	4	0
	M+RD62_LatchCounterOperation_00A	-	-	8	0
	M+RD62_SamplingOperation_00A	-	-	8	0
	M+RD62_PeriodicPulseCounter_00A	-	-	16	0
	M+RD62_PulseMeasure_00B	-	-	8	0
	M+RD62_PWMOutput_00A	-	-	12	0
	M+RD62_DegreeToCountVal_00A	-	-	32	0

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Classification	Function block name	Subroutine type		Macro type	
		Label (Word)	Latch label (Word)	Label (Word)	Latch label (Word)
Module FB (RD75P2, RD75P4, RD75D2, RD75D4)	M+RD75_SetPositioningData_00B	-	-	48	0
	M+RD75_StartPositioning_00A	-	-	8	0
	M+RD75_JOG_00A	-	-	8	0
	M+RD75_MPG_00A	-	-	8	0
	M+RD75_ChangeSpeed_00A	-	-	8	0
	M+RD75_ChangeAccDecTime_00A	-	-	8	0
	M+RD75_ChangePosition_00A	-	-	8	0
	M+RD75_Restart_00A	-	-	4	0
	M+RD75_OperateError_00A	-	-	8	0
	M+RD75_InitializeParameter_00A	-	-	4	0
	M+RD75_WriteFlash_00A	-	-	4	0
	M+RD75_ABRST_00B	-	-	20	0
Module FB (RX40NC6B)	M+RX40NC6B_SaveEventTime_00B_4	-	-	516	8
Module FB (RJ61BT11)	M+RJ61BT11_DeviceRead_02A	-	-	16	0
	M+RJ61BT11_DeviceWrite_02A	-	-	16	0
	M+RJ61BT11_Recv_02A	-	-	16	0
	M+RJ61BT11_Send_02A	-	-	16	0
	M+RJ61BT11_AutomaticUpdateBufferRead_01A	-	-	8	0
	M+RJ61BT11_AutomaticUpdateBufferWrite_01A	-	-	8	0
	M+RJ61BT11_SetParameter_02A	-	-	192	0
Module FB (RJ71EN71(E+E))	M+RJ71EN71_EE_DeviceRead_01A	-	-	56	0
	M+RJ71EN71_EE_DeviceWrite_02A	-	-	56	0
	M+RJ71EN71_EE_Send_02A	-	-	40	0
	M+RJ71EN71_EE_Recv_02A	-	-	36	0
	M+RJ71EN71_EE_RemoteStopRun_02A	-	-	52	0
	M+RJ71EN71_EE_ReadTime_02A	-	-	48	0
	M+RJ71EN71_EE_WriteTime_02A	-	-	44	0
	M+RJ71EN71_EE_Refresh_Data_01A	-	-	28	0
	M+RJ71EN71_EE_ConnectionOpen_01A	-	-	32	0
	M+RJ71EN71_EE_ConnectionClose_01A	-	-	8	0
	M+RJ71EN71_EE_Send_Socket_01B	-	-	8	0
M+RJ71EN71_EE_Recv_Socket_03B	-	-	8	0	

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Classification	Function block name	Subroutine type		Macro type	
		Label (Word)	Latch label (Word)	Label (Word)	Latch label (Word)
Module FB (RJ71EN71(E+CCIEF))	M+RJ71EN71_EF_DeviceRead_01A	-	-	56	0
	M+RJ71EN71_EF_DeviceWrite_02A	-	-	56	0
	M+RJ71EN71_EF_Send_02A	-	-	40	0
	M+RJ71EN71_EF_Recv_02A	-	-	36	0
	M+RJ71EN71_EF_RemoteStopRun_02A	-	-	52	0
	M+RJ71EN71_EF_ReadTime_02A	-	-	48	0
	M+RJ71EN71_EF_WriteTime_02A	-	-	44	0
	M+RJ71EN71_EF_Refresh_Data_01A	-	-	28	0
	M+RJ71EN71_EF_ConnectionOpen_01A	-	-	32	0
	M+RJ71EN71_EF_ConnectionClose_02A	-	-	8	0
	M+RJ71EN71_EF_Send_Socket_01B	-	-	8	0
	M+RJ71EN71_EF_Recv_Socket_03B	-	-	8	0
	M+RJ71EN71_EF_StationNoSet_01A	-	-	16	0
	M+RJ71EN71_EF_SetParameter_01A	-	-	644	0
	M+RJ71EN71_EF_RedundantSystem_GetAddress_00B	-	-	16	0
	M+RJ71EN71_EF_ReadSystemTypeInfoInformation_01A	-	-	36	0
	M+RJ71EN71_EF_ReadSystemStatusInformation_01A	-	-	36	0
Module FB (RJ71EN71(E+CCIEC))	M+RJ71EN71_EC_DeviceRead_02A	-	-	56	0
	M+RJ71EN71_EC_DeviceWrite_02A	-	-	56	0
	M+RJ71EN71_EC_Send_02A	-	-	40	0
	M+RJ71EN71_EC_Recv_02A	-	-	36	0
	M+RJ71EN71_EC_RemoteStopRun_02A	-	-	52	0
	M+RJ71EN71_EC_ReadTime_02A	-	-	48	0
	M+RJ71EN71_EC_WriteTime_02A	-	-	44	0
	M+RJ71EN71_EC_StationNoSet_02A	-	-	16	0
	M+RJ71EN71_EC_Refresh_Data_02A	-	-	28	0
	M+RJ71EN71_EC_ConnectionOpen_02A	-	-	32	0
	M+RJ71EN71_EC_ConnectionClose_02A	-	-	8	0
	M+RJ71EN71_EC_Send_Socket_02B	-	-	8	0
	M+RJ71EN71_EC_Recv_Socket_02B	-	-	8	0
Module FB (RJ71EN71(CCIEF))	M+RJ71EN71_F_DeviceRead_01A	-	-	56	0
	M+RJ71EN71_F_DeviceWrite_02A	-	-	56	0
	M+RJ71EN71_F_ReadTime_02A	-	-	48	0
	M+RJ71EN71_F_Recv_02A	-	-	36	0
	M+RJ71EN71_F_RemoteStopRun_02A	-	-	52	0
	M+RJ71EN71_F_Send_02A	-	-	40	0
	M+RJ71EN71_F_SetParameter_01A	-	-	644	0
	M+RJ71EN71_F_StationNoSet_01A	-	-	16	0
	M+RJ71EN71_F_WriteTime_02A	-	-	44	0
	M+RJ71EN71_F_ReadSystemTypeInfoInformation_01A	-	-	36	0
	M+RJ71EN71_F_ReadSystemStatusInformation_01A	-	-	36	0
M+RJ71EN71_F_RedundantSystem_GetAddress_00B	-	-	16	0	

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Classification	Function block name	Subroutine type		Macro type	
		Label (Word)	Latch label (Word)	Label (Word)	Latch label (Word)
Module FB (RJ71EN71(CCIEC))	M+RJ71EN71_C_DeviceRead_02A	-	-	56	0
	M+RJ71EN71_C_DeviceWrite_02A	-	-	56	0
	M+RJ71EN71_C_Send_02A	-	-	40	0
	M+RJ71EN71_C_Recv_02A	-	-	36	0
	M+RJ71EN71_C_RemoteStopRun_02A	-	-	52	0
	M+RJ71EN71_C_ReadTime_02A	-	-	48	0
	M+RJ71EN71_C_WriteTime_02A	-	-	44	0
	M+RJ71EN71_C_StationNoSet_02A	-	-	16	0
Module FB (RJ71GF11-T2, RJ71GF11-T2(LR), RJ71GF11-T2(MR), RJ71GF11-T2(SR))	M+RJ71GF11_DeviceRead_01A	-	-	56	0
	M+RJ71GF11_DeviceWrite_02A	-	-	56	0
	M+RJ71GF11_ReadTime_02A	-	-	48	0
	M+RJ71GF11_Recv_03A	-	-	36	0
	M+RJ71GF11_RemoteStopRun_02A	-	-	52	0
	M+RJ71GF11_Send_02A	-	-	40	0
	M+RJ71GF11_SetParameter_01A	-	-	644	0
	M+RJ71GF11_StationNoSet_01A	-	-	16	0
	M+RJ71GF11_WriteTime_02A	-	-	44	0
	M+RJ71GF11_RedundantSystem_GetAddress_00B	-	-	16	0
	M+RJ71GF11_ReadSystemTypeInfoInformation_01A	-	-	36	0
	M+RJ71GF11_ReadSystemStatusInformation_01A	-	-	36	0
Module FB (RJ71GP21-SX, RJ71GP21-SX(R))	M+RJ71GP21_DeviceRead_01A	-	-	56	0
	M+RJ71GP21_DeviceWrite_02A	-	-	56	0
	M+RJ71GP21_Send_02A	-	-	40	0
	M+RJ71GP21_Recv_02A	-	-	36	0
	M+RJ71GP21_RemoteStopRun_02A	-	-	52	0
	M+RJ71GP21_ReadTime_02A	-	-	48	0
	M+RJ71GP21_WriteTime_02A	-	-	44	0
	M+RJ71GP21_StationNoSet_01A	-	-	16	0
	M+RJ71GP21_RedundantSystem_GetAddress_00B	-	-	12	0
Module FB (RJ71C24, RJ71C24-R2, RJ71C24-R4)	M+RJ71C24_SendOndemand_01A	-	-	12	0
	M+RJ71C24_Output_01A	-	-	12	0
	M+RJ71C24_Input_01A	-	-	12	0
	M+RJ71C24_BidirectionalOutput_01A	-	-	12	0
	M+RJ71C24_BidirectionalInput_01A	-	-	12	0
	M+RJ71C24_ReadInstructionBusy_00C	-	-	4	0
	M+RJ71C24_SendUserFrame_01A	-	-	16	0
	M+RJ71C24_PutUserFrame_01A	-	-	92	0
	M+RJ71C24_GetUserFrame_01A	-	-	12	0
	M+RJ71C24_ExecCommonProtocol_01A	-	-	40	0
Module FB (RD77GF)	M+RD77GF_DeviceRead_00A	-	-	56	0
	M+RD77GF_DeviceWrite_00A	-	-	56	0
	M+RD77GF_ReadTime_00A	-	-	48	0
	M+RD77GF_WriteTime_00A	-	-	44	0
	M+RD77GF_Recv_00A	-	-	36	0
	M+RD77GF_Send_00A	-	-	40	0
	M+RD77GF_RemoteStopRun_00A	-	-	52	0

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Classification	Function block name	Subroutine type		Macro type	
		Label (Word)	Latch label (Word)	Label (Word)	Latch label (Word)
Module FB (RD77MS)	M+RD77_SetPositioningData_00E	-	-	60	0
	M+RD77_StartPositioning_00E	-	-	8	0
	M+RD77_JOG_00E	-	-	8	0
	M+RD77_MPG_00E	-	-	8	0
	M+RD77_ChangeSpeed_00E	-	-	8	0
	M+RD77_ChangeAccDecTime_00E	-	-	8	0
	M+RD77_ChangePosition_00E	-	-	8	0
	M+RD77_Restart_00E	-	-	4	0
	M+RD77_OperateError_00E	-	-	8	0
	M+RD77_ChangeServoParameter_00E	-	-	8	0
	M+RD77_ChangeTorqueControlMode_00E	-	-	12	0
	M+RD77_ChangeSpeedControlMode_00E	-	-	8	0
	M+RD77_ChangePositionControlMode_00E	-	-	8	0
	M+RD77_ChangeContinuousTorqueMode_00E	-	-	16	0
	M+RD77_Sync_00E	-	-	4	0
	M+RD77_ChangeSyncEncoderPosition_00E	-	-	8	0
	M+RD77_DisableSyncEncoder_00E	-	-	8	0
	M+RD77_EnableSyncEncoder_00E	-	-	8	0
	M+RD77_ResetSyncEncoderError_00E	-	-	8	0
	M+RD77_ConnectSyncEncoder_00E	-	-	4	0
	M+RD77_MoveCamReferencePosition_00E	-	-	8	0
	M+RD77_ChangeCamPositionPerCycle_00E	-	-	8	0
	M+RD77_ChangeMainShaftGearPositionPerCycle_00E	-	-	8	0
	M+RD77_ChangeAuxiliaryShaftGearPositionPerCycle_00E	-	-	8	0
	M+RD77_MoveCamPositionPerCycle_00E	-	-	8	0
	M+RD77_MakeRotaryCutterCam_00E	-	-	16	0
	M+RD77_CalcCamCommandPosition_00E	-	-	16	0
	M+RD77_CalcCamPositionPerCycle_00E	-	-	16	0
	M+RD77_InitializeParameter_00E	-	-	4	0
	M+RD77_WriteFlash_00E	-	-	4	0
MELSOFT Library (data analysis function block library)	M+DataAnalysis_FFTSpectrum_R_01A	41184	0	41184	0
	M+DataAnalysis_FFTSpectrumEx_R_00A	164300	0	164300	0
	M+DataAnalysis_FindCrossPointEx_R_00A	72	0	72	0
	M+DataAnalysis_BoundCompareTest_R_00A	80	0	80	0
	M+DataAnalysis_AryBoundCompareTest_R_00A	84	0	84	0

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Classification	Function block name	Subroutine type		Macro type	
		Label (Word)	Latch label (Word)	Label (Word)	Latch label (Word)
MELSOFT Library(PLCopen Motion Control FB (RD77))	MC_Power+RD77	144	0	144	0
	MCv_Home+RD77	116	0	116	0
	MC_Stop+RD77	116	0	116	0
	MC_MoveAbsolute+RD77	208	0	208	0
	MC_MoveRelative+RD77	180	0	180	0
	MC_MoveAdditive+RD77	176	0	176	0
	MC_MoveVelocity+RD77	136	0	136	0
	MC_TorqueControl+RD77	136	0	136	0
	MC_SetPosition+RD77	132	0	132	0
	MC_SetOverride+RD77	116	0	116	0
	MC_ReadParameter+RD77	128	0	128	0
	MC_WriteParameter+RD77	132	0	132	0
	MC_ReadActualPosition+RD77	132	0	132	0
	MC_ReadActualVelocity+RD77	120	0	120	0
	MC_ReadActualTorque+RD77	116	0	116	0
	MC_ReadStatus+RD77	112	0	112	0
	MC_ReadAxisInfo+RD77	132	0	132	0
	MC_ReadAxisError+RD77	116	0	116	0
	MC_Reset+RD77	112	0	112	0
	MC_ReadDigitalInput+DI16	8	0	8	0
	MC_ReadDigitalOutput+DO16	8	0	8	0
	MC_WriteDigitalOutput+DO16	8	0	8	0
	MCv_ReadServoParameter+RD77GF	120	0	120	0
	MCv_WriteServoParameter+RD77GF	160	0	160	0
MELSOFT Library(PLCopen Motion Control FB (J4GFIO))	MC_Power+J4GFIO	172	0	172	0
	MCv_Home+J4GFIO	132	0	132	0
	MC_Stop+J4GFIO	108	0	108	0
	MC_MoveAbsolute+J4GFIO	160	0	160	0
	MC_MoveRelative+J4GFIO	156	0	156	0
	MC_ReadActualPosition+J4GFIO	108	0	108	0
	MC_ReadStatus+J4GFIO	100	0	100	0
	MC_ReadAxisInfo+J4GFIO	108	0	108	0
	MC_ReadAxisError+J4GFIO	104	0	104	0
	MC_Reset+J4GFIO	108	0	108	0
	MCv_ReadServoParameter+J4GFIO	108	0	108	0
	MCv_WriteServoParameter+J4GFIO	108	0	108	0

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REVISIONS

Version	Date of Issue	Revision
-	February 2017	First edition
A	April 2017	Partial correction
B	August 2017	The description is corrected in Chapter 3.
C	August 2018	Available for e-Manual Viewer
D	October 2020	Partial correction

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