MITSUBISHI ELECTRIC

TECHNICAL BULLETIN

FA-A-0477-A

Method for Replacing CC-Link IE Field Network Analog-Digital/Digital-Analog Converter Module With CC-Link IE TSN Analog-Digital/Digital-Analog Converter Module (CC-Link IE Field Network Communication Mode)

■Date of Issue

February 2026

■Relevant Models

NZ2GFCE-60ADV8, NZ2GFCE-60ADI8, NZ2GFCE-60DAV8, NZ2GFCE-60DAI8, NZ2EX2B-60AD4, NZ2EX2B-60DA4

Thank you for your continued support of Mitsubishi Electric programmable controllers.
This technical bulletin describes how to replace a CC-Link IE Field Network analog-digital/digital-analog converter module with a CC-Link IE TSN analog-digital/digital-analog converter module (CC-Link IE Field Network communication mode).
Please consider replacing the target CC-Link IE Field Network modules with the alternative CC-Link IE TSN modules.

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1 PRECAUTIONS FOR REPLACEMENT

- Before replacement, check the functions, specifications, grounding method, and usage described in the manuals for each module.

📖 CC-Link IE Field Network Analog-Digital Converter Module (e-CON Type) User's Manual (SH-081710ENG)
📖 CC-Link IE Field Network Digital-Analog Converter Module (e-CON Type) User's Manual (SH-081712ENG)
📖 CC-Link IE Field Network Analog-Digital Converter Module User's Manual (SH-081451ENG)
📖 CC-Link IE Field Network Digital-Analog Converter Module User's Manual (SH-081453ENG)
📖 CC-Link IE TSN Analog-Digital Converter Module User's Manual (CC-Link IE Field Network Communication Mode) (SH-082236ENG)
📖 CC-Link IE TSN Digital-Analog Converter Module User's Manual (CC-Link IE Field Network Communication Mode) (SH-082238ENG)

- After replacement, perform an operation check for the entire system before operation.
- Use the firmware or software version that is compatible with the model you are replacing, as shown in the following table.

Model	Firmware version	Software version*2	
		GX Works3	GX Works2
NZ2GN2S-60AD4, NZ2GN2B-60AD4	02 or later*1	1.060N or later	1.590Q or later
NZ2GN2S-60DA4, NZ2GN2B-60DA4			

*1 The upper 2 digits of production information represents the firmware version at shipment. These models support firmware updates. For details, refer to the manual of each model.
*2 Diagnosing the replaced modules requires a specific version of software.

Point

Before replacement, confirm that the FG of the programmable controller system is grounded properly.
To ensure noise immunity, programmable controllers release noise to the ground through FGs. Improper grounding of the FG alters system configuration, possibly causing the controller to be affected by noise.
When it is difficult to check the grounding status, perform any of the following provisional measures.

- Perform independent grounding of the programmable controller system.
- Install ferrite cores on the ground cable and between module FG terminals.

2 TERMS

Generic term	Description
A/D converter module	A generic term for main analog-digital converter modules and extension analog-digital converter modules
D/A converter module	A generic term for main digital-analog converter modules and extension digital-analog converter modules
Main module	A generic term for main analog-digital converter modules and main digital-analog converter modules
Main A/D converter module	A generic term for 8-channel NZ2GFCE-60ADV8, 8-channel NZ2GFCE-60ADI8, 4-channel NZ2GN2S-60AD4, and 4-channel NZ2GN2B-60AD4
Main D/A converter module	A generic term for 8-channel NZ2GFCE-60DAV8, 8-channel NZ2GFCE-60DAI8, 4-channel NZ2GN2S-60DA4, and 4-channel NZ2GN2B-60DA4
Extension module	A generic term for extension analog-digital converter modules and extension digital-analog converter modules
Extension A/D converter module	Refers to 4-channel NZ2EX2B-60AD4.
Extension D/A converter module	Refers to 4-channel NZ2EX2B-60DA4.

3 ALTERNATIVE MODELS

3.1 List of Alternative Models

Main A/D converter modules

An 8-channel main A/D converter module should be replaced with two 4-channel main A/D converter modules.

Model to be replaced				Alternative model			
CC-Link IE Field Network A/D converter module				CC-Link IE TSN A/D converter module			
Module name		No. of channels	Model	Module type	No. of channels	Model	Restrictions
Voltage input module	e-CON type	8	NZ2GFCE-60ADV8	Spring clamp terminal block type	4	NZ2GN2S-60AD4	Two modules are required.
Current input module	e-CON type	8	NZ2GFCE-60ADI8	Spring clamp terminal block type	4	NZ2GN2S-60AD4	Two modules are required.

Main D/A converter modules

An 8-channel main D/A converter module should be replaced with two 4-channel main D/A converter modules.

Model to be replaced				Alternative model			
CC-Link IE Field Network D/A converter module				CC-Link IE TSN D/A converter module			
Module name		No. of channels	Model	Module type	No. of channels	Model	Restrictions
Voltage output module	e-CON type	8	NZ2GFCE-60DAV8	Spring clamp terminal block type	4	NZ2GN2S-60DA4	Two modules are required.
Current output module	e-CON type	8	NZ2GFCE-60DAI8	Spring clamp terminal block type	4	NZ2GN2S-60DA4	Two modules are required.

Extension A/D converter modules

A 4-channel extension A/D converter module should be replaced with one 4-channel main A/D converter module.

Model to be replaced				Alternative model			
CC-Link IE Field Network A/D converter module				CC-Link IE TSN A/D converter module			
Module name		No. of channels	Model	Module type	No. of channels	Model	Restrictions
Voltage/Current input module	Screw terminal block type	4	NZ2EX2B-60AD4	Screw terminal block type	4	NZ2GN2B-60AD4	—

Extension D/A converter modules

A 4-channel extension D/A converter module should be replaced with one 4-channel main D/A converter module.

Model to be replaced				Alternative model			
CC-Link IE Field Network D/A converter module				CC-Link IE TSN D/A converter module			
Module name		No. of channels	Model	Module type	No. of channels	Model	Restrictions
Voltage/Current output module	Screw terminal block type	4	NZ2EX2B-60DA4	Screw terminal block type	4	NZ2GN2B-60DA4	—

3.2 Comparison of Specifications

Main A/D converter modules

<table>
<tr><th colspan="2" rowspan="2">Item</th><th colspan="5">Model to be replaced</th><th colspan="4">Alternative model</th><th rowspan="2">Cautions on replacement</th></tr>
<tr><th colspan="4">NZ2GFCE-60ADV8</th><th>NZ2GFCE-60ADI8</th><th colspan="4">NZ2GN2S-60AD4</th></tr>
<tr><td colspan="2">Station type</td><td colspan="5">Remote device station</td><td colspan="4">Remote device station</td><td>—</td></tr>
<tr><td colspan="2">No. of analog input channels</td><td colspan="5">8 points (8 channels)/module</td><td colspan="4">4 points (4 channels)/module</td><td>Two modules are required to use five or more points.</td></tr>
<tr><td colspan="2">Analog input</td><td colspan="4">Voltage: -10 to 10VDC (input resistance: 1MΩ)</td><td>Current: 0 to 20mADC (input resistance: 250Ω)</td><td colspan="4">Voltage: -10 to 10VDC (input resistance: 1MΩ)
Current: 0 to 20mADC (input resistance: 250Ω)</td><td>—</td></tr>
<tr><td colspan="2" rowspan="7">I/O characteristics, maximum resolution</td><td>Input</td><td>Input range</td><td colspan="2">Digital output value</td><td>Maximum resolution</td><td>Input</td><td>Input range</td><td>Digital output value</td><td>Maximum resolution</td><td rowspan="7"></td></tr>
<tr><td rowspan="4">Voltage (NZ2GFCE-60ADV8)</td><td>-10 to 10V</td><td colspan="2">-16000 to 16000</td><td>0.625mV</td><td rowspan="4">Voltage</td><td>-10 to 10V</td><td>-16000 to 16000</td><td>0.625mV</td></tr>
<tr><td>—</td><td colspan="2" rowspan="3">0 to 16000</td><td>—</td><td>0 to 10V</td><td rowspan="3">0 to 16000</td><td>0.625mV</td></tr>
<tr><td>0 to 5V</td><td>0.3125mV</td><td>0 to 5V</td><td>0.3125mV</td></tr>
<tr><td>1 to 5V</td><td>0.25mV</td><td>1 to 5V</td><td>0.25mV</td></tr>
<tr><td rowspan="2">Current (NZ2GFCE-60ADI8)</td><td>0 to 20mA</td><td colspan="2" rowspan="2">0 to 16000</td><td>1.25μA</td><td rowspan="2">Current</td><td>0 to 20mA</td><td rowspan="2">0 to 16000</td><td>1.25μA</td></tr>
<tr><td>4 to 20mA</td><td>1μA</td><td>4 to 20mA</td><td>1μA</td></tr>
<tr><td colspan="2">Conversion accuracy</td><td colspan="5">Ambient temperature (25±5℃): ±0.2%
Ambient temperature (0 to 55℃): ±0.3%</td><td colspan="4">Ambient temperature (25±5℃): ±0.1%
Ambient temperature (0 to 55℃): ±0.2%</td><td></td></tr>
<tr><td colspan="2">Conversion speed</td><td colspan="5">1ms/channel</td><td colspan="4">200μs/channel</td><td></td></tr>
<tr><td colspan="2">Absolute maximum input</td><td colspan="4">Voltage: ±15V</td><td>Current: ±30mA*1</td><td colspan="4">Voltage: ±15V
Current: ±30mA*1</td><td></td></tr>
<tr><td rowspan="2">External interface</td><td>Module power supply part (for module power supply/FG)</td><td colspan="5">One-touch connector (sold separately)</td><td colspan="4">2-piece spring clamp terminal block</td><td>Rewiring is required due to the different interface types.</td></tr>
<tr><td>I/O part</td><td colspan="5">e-CON (sold separately)</td><td colspan="4">2-piece spring clamp terminal block</td><td></td></tr>
<tr><td colspan="2">Applicable solderless terminal</td><td colspan="5">☞ Page 9 Solderless Terminals Applicable To Each Terminal Block</td><td colspan="4">☞ Page 9 Solderless Terminals Applicable To Each Terminal Block</td><td></td></tr>
<tr><td colspan="2">Cyclic transmission (RX/RY)</td><td colspan="5">48 points*2</td><td colspan="4">32 points*2</td><td rowspan="2">The number of points needs to be changed.</td></tr>
<tr><td colspan="2">Cyclic transmission (RWr/RWw)</td><td colspan="5">24 points*2</td><td colspan="4">16 points*2</td></tr>
<tr><td colspan="2">External power supply (current)</td><td colspan="5">150mA or lower</td><td colspan="4">150mA or lower</td><td>—</td></tr>
<tr><td colspan="2">Weight</td><td colspan="5">0.22kg</td><td colspan="4">0.13kg</td><td></td></tr>
</table>

*1 The instantaneous current value that does not cause destruction of the module's internal resistance.

*2 The default value when configured using the engineering tool.

Main D/A converter modules

<table>
<tr><th colspan="2" rowspan="2">Item</th><th colspan="5">Model to be replaced</th><th colspan="4">Alternative model</th><th rowspan="2">Cautions on replacement</th></tr>
<tr><th colspan="4">NZ2GFCE-60DAV8</th><th>NZ2GFCE-60DAI8</th><th colspan="4">NZ2GN2S-60DA4</th></tr>
<tr><td colspan="2">Station type</td><td colspan="5">Remote device station</td><td colspan="4">Remote device station</td><td>—</td></tr>
<tr><td colspan="2">No. of analog input channels</td><td colspan="5">8 points (8 channels)/module</td><td colspan="4">4 points (4 channels)/module</td><td>Two modules are required to use five or more points.</td></tr>
<tr><td colspan="2">Analog output</td><td colspan="4">Voltage: -10 to 10VDC
(external load resistance value: 1kΩ to 1MΩ)</td><td>Current: 0 to 20mADC
(external load resistance value: 0Ω to 600Ω)</td><td colspan="4">Voltage: -10 to 10VDC
(external load resistance value: 1kΩ to 1MΩ)
Current: 0 to 20mADC
(external load resistance value: 0Ω to 600Ω)</td><td>—</td></tr>
<tr><td colspan="2" rowspan="8">I/O characteristics, maximum resolution</td><td>Output</td><td>Output range</td><td>Digital input value</td><td colspan="2">Maximum resolution</td><td>Output</td><td>Output range</td><td>Digital input value</td><td>Maximum resolution</td><td rowspan="8"></td></tr>
<tr><td rowspan="4">Voltage (NZ2GFCE-60DAV8)</td><td>-10 to 10V</td><td>-16000 to 16000</td><td colspan="2">0.625mV</td><td rowspan="4">Voltage</td><td>-10 to 10V</td><td>-16000 to 16000</td><td>0.625mV</td></tr>
<tr><td>—</td><td rowspan="3">0 to 12000</td><td colspan="2">—</td><td>0 to 10V</td><td rowspan="3">0 to 16000</td><td>0.625mV</td></tr>
<tr><td>0 to 5V</td><td colspan="2">0.416mV</td><td>0 to 5V</td><td>0.3125mV</td></tr>
<tr><td>1 to 5V</td><td colspan="2">0.333mV</td><td>1 to 5V</td><td>0.25mV</td></tr>
<tr><td rowspan="2">Current (NZ2GFCE-60DAI8)</td><td>0 to 20mA</td><td rowspan="2">0 to 12000</td><td colspan="2">1.66μA</td><td rowspan="2">Current</td><td>0 to 20mA</td><td rowspan="2">0 to 16000</td><td>1.25μA</td></tr>
<tr><td>4 to 20mA</td><td colspan="2">1.33μA</td><td>4 to 20mA</td><td>1μA</td></tr>
<tr><td colspan="2">Conversion accuracy</td><td colspan="5">Ambient temperature (25±5℃): ±0.2%
Ambient temperature (0 to 55℃): ±0.3%</td><td colspan="4">Ambient temperature (25±5℃): ±0.2%
Ambient temperature (0 to 55℃): ±0.3%</td></tr>
<tr><td colspan="2">Conversion speed</td><td colspan="5">1ms/channel</td><td colspan="4">200μs/channel</td></tr>
<tr><td rowspan="2">External interface</td><td>Module power supply part (for module power supply/FG)</td><td colspan="5">One-touch connector (sold separately)</td><td colspan="4">2-piece spring clamp terminal block</td><td rowspan="3">Rewiring is required due to the different interface types.</td></tr>
<tr><td>I/O part</td><td colspan="5">e-CON (sold separately)</td><td colspan="4">2-piece spring clamp terminal block</td></tr>
<tr><td colspan="2">Applicable solderless terminal</td><td colspan="5">☞ Page 9 Solderless Terminals Applicable To Each Terminal Block</td><td colspan="4">☞ Page 9 Solderless Terminals Applicable To Each Terminal Block</td></tr>
<tr><td colspan="2">Cyclic transmission (RX/RY)</td><td colspan="5">32 points*1</td><td colspan="4">32 points*1</td><td>—</td></tr>
<tr><td colspan="2">Cyclic transmission (RWr/RWw)</td><td colspan="5">24 points*1</td><td colspan="4">32 points*1</td><td>The number of points needs to be changed.</td></tr>
<tr><td colspan="2">External power supply (current)</td><td colspan="4">160mA or lower</td><td>330mA or lower</td><td colspan="4">250mA or lower</td><td>—</td></tr>
<tr><td colspan="2">Weight</td><td colspan="5">0.22kg</td><td colspan="4">0.15kg</td><td></td></tr>
</table>

*1 The default value when configured using the engineering tool.

Extension A/D converter modules

Item		Model to be replaced				Alternative model				Cautions on replacement
		NZ2EX2B-60AD4				NZ2GN2B-60AD4				
Station type		—				Remote device station				Stations need to be added.
No. of analog input channels		4 points (4 channels)/module				4 points (4 channels)/module				—
Analog input		Voltage: -10 to 10VDC (input resistance: 1MΩ) Current: 0 to 20mADC (input resistance: 250Ω)				Voltage: -10 to 10VDC (input resistance: 1MΩ) Current: 0 to 20mADC (input resistance: 250Ω)				
I/O characteristics, maximum resolution		Input	Input range	Digital output value	Maximum resolution	Input	Input range	Digital output value	Maximum resolution	
		Voltage	-10 to 10V	-16000 to 16000	0.625mV	Voltage	-10 to 10V	-16000 to 16000	0.625mV	
			—	0 to 16000	—		0 to 10V	0 to 16000	0.625mV	
			0 to 5V		0.3125mV		0 to 5V		0.3125mV	
			1 to 5V		0.25mV		1 to 5V		0.25mV	
		Current	0 to 20mA	0 to 16000	1.25μA	Current	0 to 20mA	0 to 16000	1.25μA	
			4 to 20mA		1μA		4 to 20mA		1μA	
Conversion accuracy		Ambient temperature (25±5℃): ±0.1% Ambient temperature (0 to 55℃): ±0.2%				Ambient temperature (25±5℃): ±0.1% Ambient temperature (0 to 55℃): ±0.2%				
Conversion speed		100μs/channel 400μs/channel 1ms/channel				200μs/channel				
External interface	Module power supply part (for module power supply/FG)	2-piece screw terminal block				2-piece spring clamp terminal block				Rewiring is required due to the different interface types or shapes.
	I/O part	2-piece screw terminal block				2-piece screw terminal block				
Applicable solderless terminal		☞ Page 10 Solderless Terminals Applicable To Each Terminal Block				☞ Page 10 Solderless Terminals Applicable To Each Terminal Block				
Cyclic transmission (RX/RY)		16 points*1				32 points*1				The number of points needs to be changed.
Cyclic transmission (RWr/RWw)		16 points*1				16 points*1				
External power supply (current)		45mA or lower				150mA or lower				—
Weight		0.22kg				0.20kg				

*1 The default value when configured using the engineering tool.

Extension D/A converter modules

Item		Model to be replaced				Alternative model				Cautions on replacement
		NZ2EX2B-60DA4				NZ2GN2B-60DA4				
Station type		—				Remote device station				Stations need to be added.
No. of analog input channels		4 points (4 channels)/module				4 points (4 channels)/module				—
Analog output		Voltage: -10 to 10VDC (external load resistance value: 1kΩ to 1MΩ) Current: 0 to 20mADC (external load resistance value: 0Ω to 600Ω)				Voltage: -10 to 10VDC (external load resistance value: 1kΩ to 1MΩ) Current: 0 to 20mADC (external load resistance value: 0Ω to 600Ω)				
I/O characteristics, maximum resolution		Output	Output range	Digital input value	Maximum resolution	Output	Output range	Digital input value	Maximum resolution	
		Voltage	-10 to 10V	-16000 to 16000	0.625mV	Voltage	-10 to 10V	-16000 to 16000	0.625mV	
			—	0 to 12000	—		0 to 10V	0 to 16000	0.625mV	
			0 to 5V		0.416mV		0 to 5V		0.3125mV	
			1 to 5V		0.333mV		1 to 5V		0.25mV	
		Current	0 to 20mA	0 to 12000	1.66μA	Current	0 to 20mA	0 to 16000	1.25μA	
			4 to 20mA		1.33μA		4 to 20mA		1μA	
Conversion accuracy		Ambient temperature (25±5℃): ±0.2% Ambient temperature (0 to 55℃): ±0.3%				Ambient temperature (25±5℃): ±0.2% Ambient temperature (0 to 55℃): ±0.3%				
Conversion speed		100μs/channel				200μs/channel				
External interface	Module power supply part (for module power supply/FG)	2-piece screw terminal block				2-piece spring clamp terminal block				Rewiring is required due to the different interface types.
	I/O part	2-piece screw terminal block				2-piece screw terminal block				
Applicable solderless terminal		☞ Page 10 Solderless Terminals Applicable To Each Terminal Block				☞ Page 10 Solderless Terminals Applicable To Each Terminal Block				
Cyclic transmission (RX/RY)		16 points*1				32 points*1				The number of points needs to be changed.
Cyclic transmission (RWr/RWw)		16 points*1				32 points*1				
External power supply (current)		135mA or lower				250mA or lower				—
Weight		0.23kg				0.20kg				

*1 The default value when configured using the engineering tool.

3.3 Comparison of Module Size

Main modules

Model to be replaced			Alternative model		
NZ2GFCE-60ADV8, NZ2GFCE-60ADI8, NZ2GFCE-60DAV8, NZ2GFCE-60DAI8			NZ2GN2S-60AD4, NZ2GN2S-60DA4		
Height (H) [mm]	Width (W) [mm]	Depth (D) [mm]	Height (H) [mm]	Width (W) [mm]	Depth (D) [mm]
69.5	175	47	58	130	45.5

Extension modules

Model to be replaced			Alternative model		
NZ2EX2B-60AD4, NZ2EX2B-60DA4			NZ2GN2B-60AD4, NZ2GN2B-60DA4		
Height (H) [mm]	Width (W) [mm]	Depth (D) [mm]	Height (H) [mm]	Width (W) [mm]	Depth (D) [mm]
54.5	115 (133)*1	74.5	58	147	57

*1 The number in the parentheses is the dimension including the length of fixing brackets. When a CC-Link IE TSN remote I/O module is mounted, no fixing bracket is required.

3.4 Solderless Terminals Applicable To Each Terminal Block

Main modules

When replacing modules, change the wiring due to the different types of terminal block.

Terminal block installation location	Model to be replaced		Alternative model			
	NZ2GFCE-60ADV8, NZ2GFCE-60ADI8, NZ2GFCE-60DAV8, NZ2GFCE-60DAI8 (e-CON)		NZ2GN2S-60AD4, NZ2GN2S-60DA4 (Spring clamp terminal block)			
	Applicable cable core size	Applicable cable diameter	Item, terminal shape	Model (applicable wire size)	Applicable crimping tool	References
Terminal block for module power supply/ FG	0.75mm² (0.66 to 0.98mm²)	ϕ 2.0 to 3.0mm	Bar solderless terminal with ferrule and insulation sleeve	AI0.34-10TQ (0.34mm²)	CRIMPFOX6	PHOENIX CONTACT GmbH & Co. KG
				AI0.5-10WH (0.5mm²)		
				AI0.75-10GY (0.75mm²)		
			Bar solderless terminal without ferrule and insulation sleeve	A0.5-10 (0.5mm²)		
				A0.75-10 (0.75mm²)		
				A1.0-10 (1.0mm²)		
				A1.5-10 (1.5mm²)		
Terminal block for external device connection	0.14 to 0.50mm²	ϕ 0.8 to 2.0mm	Bar solderless terminal with ferrule and insulation sleeve	AI0.34-10TQ (0.34mm²)		
				AI0.5-10WH (0.5mm²)		
				AI0.75-10GY (0.75mm²)		
			Bar solderless terminal without ferrule and insulation sleeve	A0.5-10 (0.5mm²)		
				A0.75-10 (0.75mm²)		
				A1.0-10 (1.0mm²)		
				A1.5-10 (1.5mm²)		

Extension modules

When replacing modules, change the wiring due to the different types of terminal block.

Terminal block installation location	Solderless terminal type	Model (Applicable wire size)		Applicable crimping tool	References
		Model to be replaced	Alternative model		
		NZ2EX2B-60AD4, NZ2EX2B-60DA4	NZ2GN2B-60AD4, NZ2GN2B-60DA4		
Terminal block for module power supply/ FG	Bar solderless terminal (ferrule) with insulation sleeve	—	AI0.34-10TQ (0.34mm²)	CRIMPFOX6	PHOENIX CONTACT GmbH & Co. KG
		AI0.5-10WH (0.5mm²)	AI0.5-10WH (0.5mm²)		
		AI0.75-10GY (0.75mm²)	AI0.75-10GY (0.75mm²)		
		AI 1-10RD (1.0mm²)	—		
		AI 1,5-10BK (1.5mm²)	—		
	Bar solderless terminal (ferrule) without insulation sleeve	—	A0.5-10 (0.5mm²)		
		—	A0.75-10 (0.75mm²)		
		—	A1.0-10 (1.0mm²)		
		—	A1.5-10 (1.5mm²)		
Terminal block for external device connection	Round solderless terminal	RAV1.25-3 (0.3 to 1.25mm²)	RAA1.25-3 (0.3 to 1.25mm²)	—	—
		V2-MS3 (1.25 to 2.0mm²)	V2-MS3 (1.25 to 2.0mm²)	YNT-1614 and others	J.S.T. Mfg. Co., Ltd.
		RAP2-3SL (1.25 to 2.0mm²)	—	—	—
		TGV2-3N (1.25 to 2.0mm²)	TGV2-3N (1.25 to 2.0mm²)	NH12, NH32, and others	NICHIFU Co., Ltd.

3.5 Functions Comparison

The following tables list the functions that are restricted when the CC-Link IE Field Network A/D or D/A converter module are replaced with the CC-Link IE TSN A/D or D/A converter module (CC-Link IE Field Network communication mode).
For functions other than the tables below, refer to the manuals for each module used.

Main A/D converter modules

○: Available, —: Not available

Function			Description	Model to be replaced	Alternative model	Cautions on replacement
				NZ2GFCE-60ADV8, NZ2GFCE-60ADI8	NZ2GN2S-60AD4	
A/D conversion method	Sampling processing		Performs A/D conversion on analog input values sequentially, storing the digital operation values into the remote register.	○	○	The conversion cycle differs between the model to be replaced and the alternative model due to different conversion speeds. (☞ Page 5 Comparison of Specifications)
	Averaging processing	Time average	Performs A/D conversion for a set period of time and averages the total value excluding the maximum and the minimum values, storing the averaged value into the remote register. The number of processing times within the set period of time varies depending on the number of channels used (number of channels where A/D conversion is enabled).	○	○	
		Count average	Performs A/D conversion a set number of times and averages the total value excluding the maximum and the minimum values, storing the averaged value into the remote register. Time taken to store the average value by count average varies depending on the number of channels used (the number of channels where A/D conversion is enabled).	○	○	
		Moving average	Takes in digital operation values a set number of times at every sampling period and averages these values, storing the averaged value into the remote register. The target range for average processing moves at each sampling, thereby allowing the latest digital operation value to be obtained.	○	○	
Maximum value/minimum value hold function			For each channel, stores the maximum and minimum values of digital operation values into the remote buffer memory.	○	○	In the model to be replaced, turning on and off Initial data setting request flag (RY9) allows the values to be updated to the current values. But in the alternative model, it allows the values to be updated to 0.

Function	Description	Model to be replaced	Alternative model	Cautions on replacement
		NZ2GFCE-60ADV8, NZ2GFCE-60ADI8	NZ2GN2S-60AD4	
Input signal error detection function	Detects disconnection of analog input signals.	○	○	For link devices with changed specifications, refer to the following. (☞ Page 17 Comparison of Link Devices (RX, RY, RWr, RWw)) • Latest warning code
Warning output function (process alarm)	Outputs an alert when a digital operation value falls within the alert output range set in advance.	○	○	
Digital clipping function	Allows the maximum value and the minimum value of a digital output value to be fixed at 16000 and 0 or -16000 respectively if a voltage or current exceeding the input range is input.	○	—	This function is not supported by the alternative model.
Difference conversion function	Subtracts the difference conversion reference value from a digital operation value and stores the obtained value into the remote register.	○	—	
Error notification function	Notifies an error to the master station by the remote input signal if a moderate error or a major error occurs in the A/D converter module.	○	○	For link devices with changed specifications, refer to the following. (☞ Page 17 Comparison of Link Devices (RX, RY, RWr, RWw)) • Error flag • Warning flag • Latest error code • Latest warning code • Error clear request flag
Module power supply voltage drop detection function	Detects a voltage drop of the module power supply. This function makes troubleshooting easy when the voltage of the power supplied to the A/D converter module drops, or when poor connection in the wiring occurs. Note that the voltage to be monitored for a module power supply voltage drop is 20.4V.	—	○	—

Main D/A converter modules

○: Available, —: Not available

Function	Description	Model to be replaced	Alternative model	Cautions on replacement
		NZ2GFCE-60DAV8, NZ2GFCE-60DAI8	NZ2GN2S-60DA4	
Range switching function	This function allows setting of the output range for each channel.	○	○	The digital value range differs between the model to be replaced and the alternative model in the range of 0 to 5V, 1 to 5V, 0 to 20mA, and 4 to 20mA. • Model to be replaced: 0 to 12000 • Alternative model: 0 to 16000
Cyclic data update watch function	The update intervals of cyclic data are monitored. The last output value is held or cleared when the cyclic transmission stop status continues longer than the set monitoring time.	○	—	This function is not supported by the alternative model.
Digital value range check function	Outputs an error when a digital value is out of the digital input range of the output range setting.	○	○	In the model to be replaced, if the digital value is out of range, an alarm occurs, the Warning flag turns on, and the alarm code is stored to the Latest warning code. In the alternative model, if a minor error occurs, the Error flag turns on and the error code is stored to the Latest error code.
Alarm output function	Outputs an alert when a digital value falls within the alert output range set in advance.	○	○	For link devices with changed specifications, refer to the following. (☞ Page 17 Comparison of Link Devices (RX, RY, RWr, RWw)) • Latest warning code
Error notification function	Notifies an error to the master station by the remote input signal if a moderate error or a major error occurs in the D/A converter module.	○	○	For link devices with changed specifications, refer to the following. (☞ Page 17 Comparison of Link Devices (RX, RY, RWr, RWw)) • Error flag • Warning flag • Latest error code • Latest warning code • Error clear request flag
Module power supply voltage drop detection function	Detects a voltage drop of the module power supply. This function makes troubleshooting easy when the voltage of the power supplied to D/A converter module drops, or when poor connection in the wiring occurs. Note that the voltage to be monitored for a module power supply voltage drop is 20.4V.	—	○	—

Extension A/D converter modules

○: Available, —: Not available

Function			Description	Model to be replaced	Alternative model	Cautions on replacement
				NZ2EX2B-60AD4	NZ2GN2B-60AD4	
Conversion speed switch function			Allows the selection of the conversion speeds to be either 100μs, 400μs or 1ms.	○	—	This function is not supported by the alternative model.
A/D conversion method	Sampling processing		Performs A/D conversion on analog input values sequentially, storing the digital operation values into the remote register.	○	○	The conversion cycle differs between the model to be replaced and the alternative model due to different conversion speeds.
	Averaging processing	Time average	Performs A/D conversion for a set period of time and averages the total value excluding the maximum and the minimum values, storing the averaged value into the remote register. The number of processing times within the set period of time varies depending on the number of channels used (number of channels where A/D conversion is enabled).	○	○	
		Count average	Performs A/D conversion a set number of times and averages the total value excluding the maximum and the minimum values, storing the averaged value into the remote register. Time taken to store the average value by count average varies depending on the number of channels used (the number of channels where A/D conversion is enabled).	○	○	
		Moving average	Takes in digital operation values a set number of times at every sampling period and averages these values, storing the averaged value into the remote register. The target range for average processing moves at each sampling, thereby allowing the latest digital operation value to be obtained.	○	○	
Maximum value/minimum value hold function			For each channel, stores the maximum and minimum values of digital operation values into the remote buffer memory.	○	○	In the model to be replaced, turning on and off Initial data setting request flag (RY9) allows the values to be updated to the current values. But in the alternative model, it allows the values to be updated to 0.
Input signal error detection function			Detects a disconnection of analog input signals.	○	○	For link devices with changed specifications, refer to the following. (☞ Page 17 Comparison of Link Devices (RX, RY, RWr, RWw)) • Latest warning code
Warning output function (process alarm)			Outputs an alert when a digital operation value falls within the alert output range set in advance.	○	○	

Function	Description	Model to be replaced	Alternative model	Cautions on replacement
		NZ2EX2B-60AD4	NZ2GN2B-60AD4	
Digital clipping function	Allows the maximum value and the minimum value of a digital output value to be fixed at 16000 and 0 or -16000 respectively if a voltage or current exceeding the input range is input.	○	—	This function is not supported by the alternative model.
Difference conversion function	Subtracts the difference conversion reference value from a digital operation value and stores the obtained value into the remote register.	○	—	
Trigger conversion function	Provides A/D conversion in accordance with the input of Trigger conversion request.	○	—	
CC-Link IE Field Network synchronous communication function	Performs A/D conversion with a synchronization period of the master station that supports the CC-Link IE Field Network synchronous communication function. This makes it possible to synchronize the operation with other device stations sharing the same network.	○	—	
Error notification function	Notifies an error to the master station by the remote input signal if a moderate error or a major error occurs in the A/D converter module.	○	○	For link devices with changed specifications, refer to the following. (☞ Page 17 Comparison of Link Devices (RX, RY, RWr, RWw)) • Error flag • Warning flag • Latest error code • Latest warning code • Error clear request flag
Functions with an extension analog module connected	The main A/D converter module permits the connection of one extension A/D converter module. With the extension A/D converter module connected, A/D conversion processing of up to eight channels is possible.	○	—	This function is not supported by the alternative model.
Module power supply voltage drop detection function	Detects a voltage drop of the module power supply. This function makes troubleshooting easy when the voltage of the power supplied to the A/D converter module drops, or when poor connection in the wiring occurs. Note that the voltage to be monitored for a module power supply voltage drop is 20.4V.	—	○	—

Extension D/A converter modules

○: Available, —: Not available

Function	Description	Model to be replaced	Alternative model	Cautions on replacement
		NZ2EX2B-60DA4	NZ2GN2B-60DA4	
Range switching function	This function allows setting of the output range for each channel.	○	○	The digital value range differs between the model to be replaced and the alternative model in the range of 0 to 5V, 1 to 5V, 0 to 20mA, and 4 to 20mA. • Model to be replaced: 0 to 12000 • Alternative model: 0 to 16000
Cyclic data update watch function	The update intervals of cyclic data are monitored. The last output value is held or cleared when the cyclic transmission stop status continues longer than the set monitoring time.	○	—	This function is not supported by the alternative model.
Digital value range check function	Outputs an error when a digital value is out of the digital input range of the output range setting.	○	○	In the model to be replaced, if the digital value is out of range, an alarm occurs, the Warning flag turns on, and the alarm code is stored to the Latest warning code. In the alternative model, if a minor error occurs, the Error flag turns on and the error code is stored to the Latest error code.
Alarm output function	Outputs an alert when a digital value falls within the alert output range set in advance.	○	○	For link devices with changed specifications, refer to the following. (☞ Page 17 Comparison of Link Devices (RX, RY, RWr, RWw)) • Latest warning code
Trigger output function	Provides D/A conversion in accordance with the input of Trigger output request.	○	—	This function is not supported by the alternative model.
CC-Link IE Field Network synchronous communication function	D/A conversion with a synchronization period of the master station that supports the CC-Link IE Field Network synchronous communication function. This makes it possible to synchronize the operation with other device stations sharing the same network.	○	—	
Error notification function	Notifies an error to the master station by the remote input signal if a moderate error or a major error occurs in the D/A converter module.	○	○	For link devices with changed specifications, refer to the following. (☞ Page 17 Comparison of Link Devices (RX, RY, RWr, RWw)) • Error flag • Warning flag • Latest error code • Latest warning code • Error clear request flag
Functions with an extension analog module connected	The main D/A converter module permits the connection of one extension D/A converter module. With the extension D/A converter module connected, D/A conversion processing of up to eight channels is possible.	○	—	This function is not supported by the alternative model.
Module power supply voltage drop detection function	Detects a voltage drop of the module power supply. This function makes troubleshooting easy when the voltage of the power supplied to D/A converter module drops, or when poor connection in the wiring occurs. Note that the voltage to be monitored for a module power supply voltage drop is 20.4V.	—	○	—

3.6 Comparison of Link Devices (RX, RY, RWr, RWw)

Some remote I/O signals and remote register areas may have different locations or may not be available on the CC-Link IE TSN A/D or D/A converter module (CC-Link IE Field Network communication mode).

Point

When replacing a main A/D converter module or main D/A converter module, change the module device settings used in the program to the device settings of the alternative model. If two alternative models are used, the program needs to be modified to use devices of both models.
Also, modify the program so that monitoring, configuration, and control for one module can be performed on each of the two alternative models.

Main A/D converter modules

The following shows the assignment example of I/O signals.

- Remote I/O signals of NZ2GFCE-60ADV8 or NZ2GFCE-60ADI8: RX0 to RX2F, RY0 to RY2F
- Remote I/O signals of NZ2GN2S-60AD4: RX0 to RX1F, RY0 to RY1F

The following shows the assignment example of remote register areas.

- Remote register areas of NZ2GFCE-60ADV8 or NZ2GFCE-60ADI8: RWr0 to RWr17, RWw0 to RWw17
- Remote register areas of NZ2GN2S-60AD4: RWr0 to RWr1F, RWw0 to RWw1F

Remote input signals (RX)

Model to be replaced		Alternative model				Cautions on replacement
NZ2GFCE-60ADV8, NZ2GFCE-60ADI8		NZ2GN2S-60AD4				
		First module		Second module		
Device No.	Item	Device No.	Item	Device No.	Item	
RX7	Warning flag	—	—	—	—	If the flag is used in the program, delete it.
RX9	Initial data setting completed flag	RX9	Initial data setting completed flag	RX9	Initial data setting completed flag	*1
RXA	Error flag	RXA	Error flag	RXA	Error flag	When a minor error occurs, the Error flag does not turn on in the model to be replaced, but the flag turns on in the alternative model.*1
RXB	Remote READY	RXB	Remote READY	RXB	Remote READY	*1
RX10	CH1 A/D conversion completed flag	RX10	CH1 A/D conversion completed flag	—	—	—
RX11	CH2 A/D conversion completed flag	RX11	CH2 A/D conversion completed flag	—	—	
RX12	CH3 A/D conversion completed flag	RX12	CH3 A/D conversion completed flag	—	—	
RX13	CH4 A/D conversion completed flag	RX13	CH4 A/D conversion completed flag	—	—	
RX14	CH5 A/D conversion completed flag	—	—	RX10	CH1 A/D conversion completed flag	
RX15	CH6 A/D conversion completed flag	—	—	RX11	CH2 A/D conversion completed flag	
RX16	CH7 A/D conversion completed flag	—	—	RX12	CH3 A/D conversion completed flag	
RX17	CH8 A/D conversion completed flag	—	—	RX13	CH4 A/D conversion completed flag	

Model to be replaced		Alternative model				Cautions on replacement
NZ2GFCE-60ADV8, NZ2GFCE-60ADI8		NZ2GN2S-60AD4				
		First module		Second module		
Device No.	Item	Device No.	Item	Device No.	Item	
RX18	Warning output signal	RX18	Warning output signal	RX18	Warning output signal	*1
RX1C	Input signal error detection signal	RX1C	Input signal error detection signal	RX1C	Input signal error detection signal	
RX1D	Maximum value/minimum value reset completed flag	RX1D	Maximum value/minimum value reset completed flag	RX1D	Maximum value/minimum value reset completed flag	
RX20	CH1 Difference conversion state flag	—	—	—	—	If the area is used in the program, delete it.
RX21	CH2 Difference conversion state flag	—	—	—	—	
RX22	CH3 Difference conversion state flag	—	—	—	—	
RX23	CH4 Difference conversion state flag	—	—	—	—	
RX24	CH5 Difference conversion state flag	—	—	—	—	
RX25	CH6 Difference conversion state flag	—	—	—	—	
RX26	CH7 Difference conversion state flag	—	—	—	—	
RX27	CH8 Difference conversion state flag	—	—	—	—	

*1 The program needs to be modified to use devices of both alternative models.

Remote output signals (RY)

Model to be replaced		Alternative model				Cautions on replacement
NZ2GFCE-60ADV8, NZ2GFCE-60ADI8		NZ2GN2S-60AD4				
		First module		Second module		
Device No.	Item	Device No.	Item	Device No.	Item	
RY9	Initial data setting request flag	RY9	Initial data setting request flag	RY9	Initial data setting request flag	*1
RYA	Error clear request flag	RYA	Error clear request flag	RYA	Error clear request flag	• In the model to be replaced, a warning is automatically cleared after the cause has been resolved. In the alternative model, a minor error is not automatically cleared. Turning on the Error clear request flag after the cause has been resolved clears the error. • In the model to be replaced, a warning code is automatically cleared after the cause has been resolved. In the alternative model, an alarm code is not automatically cleared. Turning on the Error clear request flag after the cause has been resolved clears the code.*1
RY1D	Maximum value/minimum value reset request	RY1D	Maximum value/ minimum value reset request	RY1D	Maximum value/ minimum value reset request	*1

Model to be replaced		Alternative model				Cautions on replacement
NZ2GFCE-60ADV8, NZ2GFCE-60ADI8		NZ2GN2S-60AD4				
		First module		Second module		
Device No.	Item	Device No.	Item	Device No.	Item	
RY20	CH1 Difference conversion trigger	—	—	—	—	If the area is used in the program, delete it.
RY21	CH2 Difference conversion trigger	—	—	—	—	
RY22	CH3 Difference conversion trigger	—	—	—	—	
RY23	CH4 Difference conversion trigger	—	—	—	—	
RY24	CH5 Difference conversion trigger	—	—	—	—	
RY25	CH6 Difference conversion trigger	—	—	—	—	
RY26	CH7 Difference conversion trigger	—	—	—	—	
RY27	CH8 Difference conversion trigger	—	—	—	—	

*1 The program needs to be modified to use devices of both alternative models.

Remote register (RWr)

Model to be replaced		Alternative model				Cautions on replacement
NZ2GFCE-60ADV8, NZ2GFCE-60ADI8		NZ2GN2S-60AD4				
		First module		Second module		
Device No.	Item	Device No.	Item	Device No.	Item	
RWr0	Latest error code	RWr0	Latest error code	RWr0	Latest error code	The stored error code differs. For details, refer to the manual of each model.*1
RWr1	Latest warning code	RWr1	Latest warning code	RWr1	Latest warning code	• The stored warning code and alarm code differ. For details, refer to the manual of each model. • In the model to be replaced, if a minor error (warning) other than alarms occurs, the Warning flag turns on and the warning code is stored to the Latest warning code. In the alternative model, if a minor error occurs, the Error flag turns on and the error code is stored to the Latest error code. • In the model to be replaced, a warning code is automatically cleared after the cause has been resolved. In the alternative model, an alarm code is not automatically cleared. Turning on the Error clear request flag after the cause has been resolved clears the code.*1

Model to be replaced		Alternative model				Cautions on replacement
NZ2GFCE-60ADV8, NZ2GFCE-60ADI8		NZ2GN2S-60AD4				
		First module		Second module		
Device No.	Item	Device No.	Item	Device No.	Item	
RWr2	CH1 Digital operation value	RWr2	CH1 Digital operation value	—	—	—
RWr3	CH2 Digital operation value	RWr3	CH2 Digital operation value	—	—	
RWr4	CH3 Digital operation value	RWr4	CH3 Digital operation value	—	—	
RWr5	CH4 Digital operation value	RWr5	CH4 Digital operation value	—	—	
RWr6	CH5 Digital operation value	—	—	RWr2	CH1 Digital operation value	
RWr7	CH6 Digital operation value	—	—	RWr3	CH2 Digital operation value	
RWr8	CH7 Digital operation value	—	—	RWr4	CH3 Digital operation value	
RWr9	CH8 Digital operation value	—	—	RWr5	CH4 Digital operation value	
RWrA	Input signal error detection flag	RWrA	Input signal error detection flag	RWrA	Input signal error detection flag	*1
RWrB	Warning output flag	RWrB	Warning output flag	RWrB	Warning output flag	
RWr10	CH1 Difference conversion reference value	—	—	—	—	If the area is used in the program, delete it.
RWr11	CH2 Difference conversion reference value	—	—	—	—	
RWr12	CH3 Difference conversion reference value	—	—	—	—	
RWr13	CH4 Difference conversion reference value	—	—	—	—	
RWr14	CH5 Difference conversion reference value	—	—	—	—	
RWr15	CH6 Difference conversion reference value	—	—	—	—	
RWr16	CH7 Difference conversion reference value	—	—	—	—	
RWr17	CH8 Difference conversion reference value	—	—	—	—	

*1 The program needs to be modified to use devices of both alternative models.

Remote register (RWw)

Model to be replaced		Alternative model				Cautions on replacement
NZ2GFCE-60ADV8, NZ2GFCE-60ADI8		NZ2GN2S-60AD4				
		First module		Second module		
Device No.	Item	Device No.	Item	Device No.	Item	
RWw2	CH1 Conversion value shift amount	RWw2	CH1 Conversion value shift amount	—	—	—
RWw3	CH2 Conversion value shift amount	RWw3	CH2 Conversion value shift amount	—	—	
RWw4	CH3 Conversion value shift amount	RWw4	CH3 Conversion value shift amount	—	—	
RWw5	CH4 Conversion value shift amount	RWw5	CH4 Conversion value shift amount	—	—	
RWw6	CH5 Conversion value shift amount	—	—	RWw2	CH1 Conversion value shift amount	
RWw7	CH6 Conversion value shift amount	—	—	RWw3	CH2 Conversion value shift amount	
RWw8	CH7 Conversion value shift amount	—	—	RWw4	CH3 Conversion value shift amount	
RWw9	CH8 Conversion value shift amount	—	—	RWw5	CH4 Conversion value shift amount	

Main D/A converter modules

The following shows the assignment example of I/O signals.

- Remote I/O signals of NZ2GFCE-60DAV8 or NZ2GFCE-60DAI8: RX0 to RX1F, RY0 to RY1F
- Remote I/O signals of NZ2GN2S-60DA4: RX0 to RX1F, RY0 to RY1F

The following shows the assignment example of remote register areas.

- Remote register areas of NZ2GFCE-60DAV8 or NZ2GFCE-60DAI8: RWr0 to RWr17, RWw0 to RWw17
- Remote register areas of NZ2GN2S-60DA4: RWr0 to RWr1F, RWw0 to RWw1F

Remote input signals (RX)

Model to be replaced		Alternative model				Cautions on replacement
NZ2GFCE-60DAV8, NZ2GFCE-60DAI8		NZ2GN2S-60DA4				
		First module		Second module		
Device No.	Item	Device No.	Item	Device No.	Item	
RX7	Warning flag	—	—	—	—	If the flag is used in the program, delete it.
RX9	Initial data setting completed flag	RX9	Initial data setting completed flag	RX9	Initial data setting completed flag	*1
RXA	Error flag	RXA	Error flag	RXA	Error flag	When a minor error occurs, the Error flag does not turn on in the model to be replaced, but the flag turns on in the alternative model.*1
RXB	Remote READY	RXB	Remote READY	RXB	Remote READY	*1
RX1E	Warning output signal	RX1E	Warning output signal	RX1E	Warning output signal	

*1 The program needs to be modified to use devices of both alternative models.

Remote output signals (RY)

Model to be replaced		Alternative model				Cautions on replacement
NZ2GFCE-60DAV8, NZ2GFCE-60DAI8		NZ2GN2S-60DA4				
		First module		Second module		
Device No.	Item	Device No.	Item	Device No.	Item	
RY9	Initial data setting request flag	RY9	Initial data setting request flag	RY9	Initial data setting request flag	*1
RYA	Error clear request flag	RYA	Error clear request flag	RYA	Error clear request flag	In the model to be replaced, a warning is automatically cleared after the cause has been resolved. In the alternative model, a minor error is not automatically cleared. Turning on the Error clear request flag after the cause has been resolved clears the error.*1
RY10	CH1 Output enable/disable flag	RY10	CH1 Output enable/ disable flag	—	—	—
RY11	CH2 Output enable/disable flag	RY11	CH2 Output enable/ disable flag	—	—	
RY12	CH3 Output enable/disable flag	RY12	CH3 Output enable/ disable flag	—	—	
RY13	CH4 Output enable/disable flag	RY13	CH4 Output enable/ disable flag	—	—	
RY14	CH5 Output enable/disable flag	—	—	RY10	CH1 Output enable/ disable flag	
RY15	CH6 Output enable/disable flag	—	—	RY11	CH2 Output enable/ disable flag	
RY16	CH7 Output enable/disable flag	—	—	RY12	CH3 Output enable/ disable flag	
RY17	CH8 Output enable/disable flag	—	—	RY13	CH4 Output enable/ disable flag	
RY1E	Warning output clear request flag	RY1E	Warning output clear request flag	RY1E	Warning output clear request flag	*1

*1 The program needs to be modified to use devices of both alternative models.

Remote register (RWr)

Model to be replaced		Alternative model				Cautions on replacement
NZ2GFCE-60DAV8, NZ2GFCE-60DAI8		NZ2GN2B-60DA4				
		First module		Second module		
Device No.	Item	Device No.	Item	Device No.	Item	
RWr0	Latest error code	RWr0	Latest error code	RWr0	Latest error code	The stored error code differs. For details, refer to the manual of each model.*1
RWr1	Latest warning code	RWr1	Latest warning code	RWr1	Latest warning code	• The stored warning code and alarm code differ. For details, refer to the manual of each model. • In the model to be replaced, if a minor error (warning) other than alarms occurs, the Warning flag turns on and the warning code is stored to the Latest warning code. In the alternative model, if a minor error occurs, the Error flag turns on and the error code is stored to the Latest error code.*1

Model to be replaced		Alternative model				Cautions on replacement
NZ2GFCE-60DAV8, NZ2GFCE-60DAI8		NZ2GN2B-60DA4				
		First module		Second module		
Device No.	Item	Device No.	Item	Device No.	Item	
RWr2	CH1 Set value check code	RWr2	CH1 Set value check code	—	—	—
RWr3	CH2 Set value check code	RWr3	CH2 Set value check code	—	—	
RWr4	CH3 Set value check code	RWr4	CH3 Set value check code	—	—	
RWr5	CH4 Set value check code	RWr5	CH4 Set value check code	—	—	
RWr6	CH5 Set value check code	—	—	RWr2	CH1 Set value check code	
RWr7	CH6 Set value check code	—	—	RWr3	CH2 Set value check code	
RWr8	CH7 Set value check code	—	—	RWr4	CH3 Set value check code	
RWr9	CH8 Set value check code	—	—	RWr5	CH4 Set value check code	
RWrA	Warning output flag	RWrA	Warning output flag	RWrA	Warning output flag	*1

*1 The program needs to be modified to use devices of both alternative models.

Remote register (RWw)

Model to be replaced		Alternative model				Cautions on replacement
NZ2GFCE-60DAV8, NZ2GFCE-60DAI8		NZ2GN2S-60DA4				
		First module		Second module		
Device No.	Item	Device No.	Item	Device No.	Item	
RWw2	CH1 Digital value	RWw2	CH1 Digital value	—	—	The digital value range differs between the model to be replaced and the alternative model in the range of 0 to 5V, 1 to 5V, 0 to 20mA, and 4 to 20mA. • Model to be replaced: 0 to 12000 • Alternative model: 0 to 16000
RWw3	CH2 Digital value	RWw3	CH2 Digital value	—	—	
RWw4	CH3 Digital value	RWw4	CH3 Digital value	—	—	
RWw5	CH4 Digital value	RWw5	CH4 Digital value	—	—	
RWw6	CH5 Digital value	—	—	RWw2	CH1 Digital value	
RWw7	CH6 Digital value	—	—	RWw3	CH2 Digital value	
RWw8	CH7 Digital value	—	—	RWw4	CH3 Digital value	
RWw9	CH8 Digital value	—	—	RWw5	CH4 Digital value	
RWw10	CH1 Shifting set value	RWw10	CH1 Shifting set value	—	—	—
RWw11	CH2 Shifting set value	RWw11	CH2 Shifting set value	—	—	
RWw12	CH3 Shifting set value	RWw12	CH3 Shifting set value	—	—	
RWw13	CH4 Shifting set value	RWw13	CH4 Shifting set value	—	—	
RWw14	CH5 Shifting set value	—	—	RWw10	CH1 Shifting set value	
RWw15	CH6 Shifting set value	—	—	RWw11	CH2 Shifting set value	
RWw16	CH7 Shifting set value	—	—	RWw12	CH3 Shifting set value	
RWw17	CH8 Shifting set value	—	—	RWw13	CH4 Shifting set value	

Extension A/D converter modules

The following shows the assignment example of I/O signals.

- Main module with extension modules: RX0 to RX1F, RY0 to RY1F
- Remote I/O signals of NZ2EX2B-60DA4: RX20 to RX2F, RY20 to RY2F
- Remote I/O signals of NZ2GN2B-60AD4: RX0 to RX1F, R0 to RY1F

The following shows the assignment example of remote register areas.

- Main module with extension modules: RWr0 to RWrF, RWw0 to RWwF
- Remote register areas of NZ2EX2B-60AD4: RWr10 to RWr1F, RWw10 to RWw1F
- Remote register areas of NZ2GN2B-60AD4: RWr0 to RWrF, RWw0 to RWwF

Point

The information provided applies when the main module is not replaced.
If you are considering replacing the main module, refer to the manual for the module.

Remote input signals (RX)

■When the extension module is connected to NZ2GF2BN-60AD4

Model to be replaced			Alternative model		Cautions on replacement
NZ2GF2BN-60AD4 NZ2EX2B-60AD4			NZ2GN2B-60AD4		
First module, Second module			Second module		
Model name	Device No.	Item	Device No.	Item	
Main module	RX7	Warning flag	—	—	—
	RX9	Initial data setting completed flag	RX9	Initial data setting completed flag	*1
	RXA	Error flag	RXA	Error flag	When a minor error occurs, the Error flag does not turn on in the model to be replaced, but the flag turns on in the alternative model.*1
	RXB	Remote READY	RXB	Remote READY	*1
	RX10	CH1 A/D conversion completed flag	—	—	—
	RX11	CH2 A/D conversion completed flag	—	—	
	RX12	CH3 A/D conversion completed flag	—	—	
	RX13	CH4 A/D conversion completed flag	—	—	
	RX14	CH1 Difference conversion state flag	—	—	
	RX15	CH2 Difference conversion state flag	—	—	
	RX16	CH3 Difference conversion state flag	—	—	
	RX17	CH4 Difference conversion state flag	—	—	
	RX18	Warning output signal	—	—	
	RX19	Trigger conversion completed flag	—	—	
	RX1C	Input signal error detection signal	—	—	
	RX1D	Maximum value/minimum value reset completed flag	—	—	
	RX1F	External power supply monitor status flag (for extension output module)	—	—	

Model to be replaced			Alternative model		Cautions on replacement
NZ2GF2BN-60AD4 NZ2EX2B-60AD4			NZ2GN2B-60AD4		
First module, Second module			Second module		
Model name	Device No.	Item	Device No.	Item	
Extension module	RX20	CH1 A/D conversion completed flag	RX10	CH1 A/D conversion completed flag	—
	RX21	CH2 A/D conversion completed flag	RX11	CH2 A/D conversion completed flag	
	RX22	CH3 A/D conversion completed flag	RX12	CH3 A/D conversion completed flag	
	RX23	CH4 A/D conversion completed flag	RX13	CH4 A/D conversion completed flag	
	RX24	CH1 Difference conversion state flag	—	—	If the area is used in the program, delete it.
	RX25	CH2 Difference conversion state flag	—	—	
	RX26	CH3 Difference conversion state flag	—	—	
	RX27	CH4 Difference conversion state flag	—	—	
	RX28	Warning output signal	RX18	Warning output signal	—
	RX29	Trigger conversion completed flag	—	—	If the area is used in the program, delete it.
	RX2C	Input signal error detection signal	RX1C	Input signal error detection signal	—
	RX2D	Maximum value/minimum value reset completed flag	RX1D	Maximum value/minimum value reset completed flag	
	RX2F	External power supply READY flag	—	—	If the area is used in the program, delete it.

*1 The program needs to be modified to use devices of both the main module, to which the extension module to be replaced was connected, and the alternative model.

■When the extension module is connected to NZ2GF2BN-60DA4

Model to be replaced			Alternative model		Cautions on replacement
NZ2GF2BN-60DA4 NZ2EX2B-60AD4			NZ2GN2B-60AD4		
First module, Second module			Second module		
Model name	Device No.	Item	Device No.	Item	
Main module	RX7	Warning flag	—	—	—
	RX9	Initial data setting completed flag	RX9	Initial data setting completed flag	*1
	RXA	Error flag	RXA	Error flag	When a minor error occurs, the Error flag does not turn on in the model to be replaced, but the flag turns on in the alternative model.*1
	RXB	Remote READY	RXB	Remote READY	*1
	RX19	Trigger output completed flag	—	—	—
	RX1E	Warning output signal	—	—	
	RX1F	External power supply monitor status flag (for extension output module)	—	—	
Extension module	RX20	CH1 A/D conversion completed flag	RX10	CH1 A/D conversion completed flag	—
	RX21	CH2 A/D conversion completed flag	RX11	CH2 A/D conversion completed flag	
	RX22	CH3 A/D conversion completed flag	RX12	CH3 A/D conversion completed flag	
	RX23	CH4 A/D conversion completed flag	RX13	CH4 A/D conversion completed flag	
	RX24	CH1 Difference conversion state flag	—	—	If the area is used in the program, delete it.
	RX25	CH2 Difference conversion state flag	—	—	
	RX26	CH3 Difference conversion state flag	—	—	
	RX27	CH4 Difference conversion state flag	—	—	
	RX28	Warning output signal	RX18	Warning output signal	—
	RX29	Trigger conversion completed flag	—	—	If the area is used in the program, delete it.
	RX2C	Input signal error detection signal	RX1C	Input signal error detection signal	—
	RX2D	Maximum value/minimum value reset completed flag	RX1D	Maximum value/minimum value reset completed flag	
	RX2F	External power supply READY flag	—	—	If the area is used in the program, delete it.

*1 The program needs to be modified to use devices of both the main module, to which the extension module to be replaced was connected, and the alternative model.

Remote output signals (RY)

■When the extension module is connected to NZ2GF2BN-60AD4

Model to be replaced			Alternative model		Cautions on replacement
NZ2GF2BN-60AD4 NZ2EX2B-60AD4			NZ2GN2B-60AD4		
First module, Second module			Second module		
Model name	Device No.	Item	Device No.	Item	
Main module	RY9	Initial data setting request flag	RY9	Initial data setting request flag	*1
	RYA	Error clear request flag	RYA	Error clear request flag	• In the model to be replaced, a warning is automatically cleared after the cause has been resolved. In the alternative model, a minor error is not automatically cleared. Turning on the Error clear request flag after the cause has been resolved clears the error. • In the model to be replaced, a warning code is automatically cleared after the cause has been resolved. In the alternative model, an alarm code is not automatically cleared. Turning on the Error clear request flag after the cause has been resolved clears the code.*1
	RY14	CH1 Difference conversion trigger	—	—	—
	RY15	CH2 Difference conversion trigger	—	—	
	RY16	CH3 Difference conversion trigger	—	—	
	RY17	CH4 Difference conversion trigger	—	—	
	RY19	Trigger conversion request	—	—	
	RY1A	Trigger conversion completed clear request	—	—	
	RY1D	Maximum value/minimum value reset request	—	—	
	RY1F	External power supply monitor request flag (for extension output module)	—	—	
Extension module	RY24	CH1 Difference conversion trigger	—	—	If the area is used in the program, delete it.
	RY25	CH2 Difference conversion trigger	—	—	
	RY26	CH3 Difference conversion trigger	—	—	
	RY27	CH4 Difference conversion trigger	—	—	
	RY29	Trigger conversion request	—	—	
	RY2A	Trigger conversion completed clear request	—	—	
	RY2D	Maximum value/minimum value reset request	RY1D	Maximum value/minimum value reset request	—

*1 The program needs to be modified to use devices of both the main module, to which the extension module to be replaced was connected, and the alternative model.

■When the extension module is connected to NZ2GF2BN-60DA4

Model to be replaced			Alternative model		Cautions on replacement
NZ2GF2BN-60DA4 NZ2EX2B-60AD4			NZ2GN2B-60AD4		
First module, Second module			Second module		
Model name	Device No.	Item	Device No.	Item	
Main module	RY9	Initial data setting request flag	RY9	Initial data setting request flag	*1
	RYA	Error clear request flag	RYA	Error clear request flag	• In the model to be replaced, a warning is automatically cleared after the cause has been resolved. In the alternative model, a minor error is not automatically cleared. Turning on the Error clear request flag after the cause has been resolved clears the error. • In the model to be replaced, a warning code is automatically cleared after the cause has been resolved. In the alternative model, an alarm code is not automatically cleared. Turning on the Error clear request flag after the cause has been resolved clears the code.*1
	RY10	CH1 Output enable/disable flag	—	—	—
	RY11	CH2 Output enable/disable flag	—	—	
	RY12	CH3 Output enable/disable flag	—	—	
	RY13	CH4 Output enable/disable flag	—	—	
	RY19	Trigger output request	—	—	
	RY1A	Trigger output completed clear request	—	—	
	RY1E	Warning output clear request flag	—	—	
	RY1F	External power supply monitor request flag (for extension output module)	—	—	
Extension module	RY24	CH1 Difference conversion trigger	—	—	If the area is used in the program, delete it.
	RY25	CH2 Difference conversion trigger	—	—	
	RY26	CH3 Difference conversion trigger	—	—	
	RY27	CH4 Difference conversion trigger	—	—	
	RY29	Trigger conversion request	—	—	
	RY2A	Trigger conversion completed clear request	—	—	
	RY2D	Maximum value/minimum value reset request	RY1D	Maximum value/minimum value reset request	—

*1 The program needs to be modified to use devices of both the main module, to which the extension module to be replaced was connected, and the alternative model.

Remote register (RWr)

■When the extension module is connected to NZ2GF2BN-60AD4

Model to be replaced			Alternative model		Cautions on replacement
NZ2GF2BN-60AD4 NZ2EX2B-60AD4			NZ2GN2B-60AD4		
First module, Second module			Second module		
Model name	Device No.	Item	Device No.	Item	
Main module	RWr0	Latest error code	RWr0	Latest error code	The stored error code differs. For details, refer to the manual of each model.*1
	RWr1	Latest warning code	RWr1	Latest warning code	• The stored warning code and alarm code differ. For details, refer to the manual of each model. • In the model to be replaced, if a minor error (warning) other than alarms occurs, the Warning flag turns on and the warning code is stored to the Latest warning code. In the alternative model, if a minor error occurs, the Error flag turns on and the error code is stored to the Latest error code. • In the model to be replaced, a warning code is automatically cleared after the cause has been resolved. In the alternative model, an alarm code is not automatically cleared. Turning on the Error clear request flag after the cause has been resolved clears the code.*1
	RWr2	CH1 Digital operation value	—	—	—
	RWr3	CH2 Digital operation value	—	—	
	RWr4	CH3 Digital operation value	—	—	
	RWr5	CH4 Digital operation value	—	—	
	RWr6	CH1 Difference conversion reference value	—	—	
	RWr7	CH2 Difference conversion reference value	—	—	
	RWr8	CH3 Difference conversion reference value	—	—	
	RWr9	CH4 Difference conversion reference value	—	—	
	RWrA	Input signal error detection flag	—	—	
	RWrB	Warning output flag	—	—	

Model to be replaced			Alternative model		Cautions on replacement
NZ2GF2BN-60AD4 NZ2EX2B-60AD4			NZ2GN2B-60AD4		
First module, Second module			Second module		
Model name	Device No.	Item	Device No.	Item	
Extension module	RWr12	CH1 Digital operation value	RWr2	CH1 Digital operation value	—
	RWr13	CH2 Digital operation value	RWr3	CH2 Digital operation value	
	RWr14	CH3 Digital operation value	RWr4	CH3 Digital operation value	
	RWr15	CH4 Digital operation value	RWr5	CH4 Digital operation value	
	RWr16	CH1 Difference conversion reference value	—	—	If the area is used in the program, delete it.
	RWr17	CH2 Difference conversion reference value	—	—	
	RWr18	CH3 Difference conversion reference value	—	—	
	RWr19	CH4 Difference conversion reference value	—	—	
	RWr1A	Input signal error detection flag	RWrA	Input signal error detection flag	—
	RWr1B	Warning output flag	RWrB	Warning output flag	

*1 The program needs to be modified to use devices of both the main module, to which the extension module to be replaced was connected, and the alternative model.

■When the extension module is connected to NZ2GF2BN-60DA4

Model to be replaced			Alternative model		Cautions on replacement
NZ2GF2BN-60DA4 NZ2EX2B-60AD4			NZ2GN2B-60AD4		
First module, Second module			Second module		
Model name	Device No.	Item	Device No.	Item	
Main module	RWr0	Latest error code	RWr0	Latest error code	The stored error code differs. For details, refer to the manual of each model.*1
	RWr1	Latest warning code	RWr1	Latest warning code	• The stored warning code and alarm code differ. For details, refer to the manual of each model. • In the model to be replaced, if a minor error (warning) other than alarms occurs, the Warning flag turns on and the warning code is stored to the Latest warning code. In the alternative model, if a minor error occurs, the Error flag turns on and the error code is stored to the Latest error code. • In the model to be replaced, a warning code is automatically cleared after the cause has been resolved. In the alternative model, an alarm code is not automatically cleared. Turning on the Error clear request flag after the cause has been resolved clears the code.*1
	RWr2	CH1 Set value check code	—	—	—
	RWr3	CH2 Set value check code	—	—	
	RWr4	CH3 Set value check code	—	—	
	RWr5	CH4 Set value check code	—	—	
	RWrA	Warning output flag	—	—	
Extension module	RWr12	CH1 Digital operation value	RWr2	CH1 Digital operation value	—
	RWr13	CH2 Digital operation value	RWr3	CH2 Digital operation value	
	RWr14	CH3 Digital operation value	RWr4	CH3 Digital operation value	
	RWr15	CH4 Digital operation value	RWr5	CH4 Digital operation value	
	RWr16	CH1 Difference conversion reference value	—	—	If the area is used in the program, delete it.
	RWr17	CH2 Difference conversion reference value	—	—	
	RWr18	CH3 Difference conversion reference value	—	—	
	RWr19	CH4 Difference conversion reference value	—	—	
	RWr1A	Input signal error detection flag	RWrA	Input signal error detection flag	—
	RWr1B	Warning output flag	RWrB	Warning output flag	

*1 The program needs to be modified to use devices of both the main module, to which the extension module to be replaced was connected, and the alternative model.

Remote register (RWw)

■When the extension module is connected to NZ2GF2BN-60AD4

Model to be replaced			Alternative model		Cautions on replacement
NZ2GF2BN-60AD4 NZ2EX2B-60AD4			NZ2GN2B-60AD4		
First module, Second module			Second module		
Model name	Device No.	Item	Device No.	Item	
Main module	RWw2	CH1 Conversion value shift amount	—	—	—
	RWw3	CH2 Conversion value shift amount	—	—	
	RWw4	CH3 Conversion value shift amount	—	—	
	RWw5	CH4 Conversion value shift amount	—	—	
Extension module	RWw12	CH1 Conversion value shift amount	RWw2	CH1 Conversion value shift amount	—
	RWw13	CH2 Conversion value shift amount	RWw3	CH2 Conversion value shift amount	
	RWw14	CH3 Conversion value shift amount	RWw4	CH3 Conversion value shift amount	
	RWw15	CH4 Conversion value shift amount	RWw5	CH4 Conversion value shift amount	

■When the extension module is connected to NZ2GF2BN-60DA4

Model to be replaced			Alternative model		Cautions on replacement
NZ2GF2BN-60DA4 NZ2EX2B-60AD4			NZ2GN2B-60AD4		
First module, Second module			Second module		
Model name	Device No.	Item	Device No.	Item	
Main module	RWw2	CH1 Digital value	—	—	—
	RWw3	CH2 Digital value	—	—	
	RWw4	CH3 Digital value	—	—	
	RWw5	CH4 Digital value	—	—	
	RWw6	CH1 Shifting set value	—	—	
	RWw7	CH2 Shifting set value	—	—	
	RWw8	CH3 Shifting set value	—	—	
	RWw9	CH4 Shifting set value	—	—	
Extension module	RWw12	CH1 Conversion value shift amount	RWw2	CH1 Conversion value shift amount	—
	RWw13	CH2 Conversion value shift amount	RWw3	CH2 Conversion value shift amount	
	RWw14	CH3 Conversion value shift amount	RWw4	CH3 Conversion value shift amount	
	RWw15	CH4 Conversion value shift amount	RWw5	CH4 Conversion value shift amount	

Extension D/A converter modules

The following shows the assignment example of I/O signals.

- Main module with extension modules: RX0 to RX1F, RY0 to RY1F
- Remote I/O signals of NZ2EX2B-60DA4: RX20 to RX2F, RY2 to RY2F
- Remote I/O signals of NZ2GN2B-60DA4: RX0 to RX1F, RY00 to RYF

The following shows the assignment example of remote register areas.

- Main module with extension modules: RWr0 to RWrF, RWw0 to RWwF
- Remote register areas of NZ2EX2B-60DA4: RWr10 to RWr2F, RWw10 to RWw2F
- Remote register areas of NZ2GN2B-60DA4: RWr0 to RWr1F, RWw0 to RWw1F

Point

The information provided applies when the main module is not replaced.
If you are considering replacing the main module, refer to the manual for the module.

Remote input signals (RX)

■When the extension module is connected to NZ2GF2BN-60AD4

Model to be replaced			Alternative model		Cautions on replacement
NZ2GF2BN-60AD4 NZ2EX2B-60DA4			NZ2GN2B-60DA4		
First module, Second module			Second module		
Model name	Device No.	Item	Device No.	Item	
Main module	RX7	Warning flag	—	—	—
	RX9	Initial data setting completed flag	RX9	Initial data setting completed flag	*1
	RXA	Error flag	RXA	Error flag	When a minor error occurs, the Error flag does not turn on in the model to be replaced, but the flag turns on in the alternative model.*1
	RXB	Remote READY	RXB	Remote READY	*1
	RX10	CH1 A/D conversion completed flag	—	—	—
	RX11	CH2 A/D conversion completed flag	—	—	
	RX12	CH3 A/D conversion completed flag	—	—	
	RX13	CH4 A/D conversion completed flag	—	—	
	RX14	CH1 Difference conversion state flag	—	—	
	RX15	CH2 Difference conversion state flag	—	—	
	RX16	CH3 Difference conversion state flag	—	—	
	RX17	CH4 Difference conversion state flag	—	—	
	RX18	Warning output signal	—	—	
	RX19	Trigger conversion completed flag	—	—	
	RX1C	Input signal error detection signal	—	—	
	RX1D	Maximum value/minimum value reset completed flag	—	—	
	RX1F	External power supply monitor status flag (for extension output module)	—	—	
Extension module	RX29	Trigger output completed flag	—	—	If the area is used in the program, delete it.
	RX2E	Warning output signal	RX1E	Warning output signal	—
	RX2F	External power supply READY flag	—	—	If the area is used in the program, delete it.

*1 The program needs to be modified to use devices of both the main module, to which the extension module to be replaced was connected, and the alternative model.

■When the extension module is connected to NZ2GF2BN-60DA4

Model to be replaced			Alternative model		Cautions on replacement
NZ2GF2BN-60DA4 NZ2EX2B-60DA4			NZ2GN2B-60DA4		
First module, Second module			Second module		
Model name	Device No.	Item	Device No.	Item	
Main module	RX7	Warning flag	—	—	—
	RX9	Initial data setting completed flag	RX9	Initial data setting completed flag	*1
	RXA	Error flag	RXA	Error flag	When a minor error occurs, the Error flag does not turn on in the model to be replaced, but the flag turns on in the alternative model.*1
	RXB	Remote READY	RXB	Remote READY	*1
	RX19	Trigger output completed flag	—	—	—
	RX1E	Warning output signal	—	—	
	RX1F	External power supply monitor status flag (for extension output module)	—	—	
Extension module	RX29	Trigger output completed flag	—	—	If the area is used in the program, delete it.
	RX2E	Warning output signal	RX1E	Warning output signal	—
	RX2F	External power supply READY flag	—	—	If the area is used in the program, delete it.

*1 The program needs to be modified to use devices of both the main module, to which the extension module to be replaced was connected, and the alternative model.

Remote output signals (RY)

■When the extension module is connected to NZ2GF2BN-60AD4

Model to be replaced			Alternative model		Cautions on replacement
NZ2GF2BN-60AD4 NZ2EX2B-60DA4			NZ2GN2B-60DA4		
First module, Second module			Second module		
Model name	Device No.	Item	Device No.	Item	
Main module	RY9	Initial data setting request flag	RY9	Initial data setting request flag	*1
	RYA	Error clear request flag	RYA	Error clear request flag	In the model to be replaced, a warning is automatically cleared after the cause has been resolved. In the alternative model, a minor error is not automatically cleared. Turning on the Error clear request flag after the cause has been resolved clears the error.*1
	RY14	CH1 Difference conversion trigger	—	—	—
	RY15	CH2 Difference conversion trigger	—	—	
	RY16	CH3 Difference conversion trigger	—	—	
	RY17	CH4 Difference conversion trigger	—	—	
	RY19	Trigger conversion request	—	—	
	RY1A	Trigger conversion completed clear request	—	—	
	RY1D	Maximum value/minimum value reset request	—	—	
	RY1F	External power supply monitor request flag (for extension output module)	—	—	
Extension module	RY20	CH1 Output enable/disable flag	RY10	CH1 Output enable/disable flag	—
	RY21	CH2 Output enable/disable flag	RY11	CH2 Output enable/disable flag	
	RY22	CH3 Output enable/disable flag	RY12	CH3 Output enable/disable flag	
	RY23	CH4 Output enable/disable flag	RY13	CH4 Output enable/disable flag	
	RY29	Trigger output request	—	—	If the area is used in the program, delete it.
	RY2A	Trigger output completed clear request	—	—	
	RY2E	Warning output clear request flag	RY1E	Warning output clear request flag	—

*1 The program needs to be modified to use devices of both the main module, to which the extension module to be replaced was connected, and the alternative model.

■When the extension module is connected to NZ2GF2BN-60DA4

Model to be replaced			Alternative model		Cautions on replacement
NZ2GF2BN-60DA4 NZ2EX2B-60DA4			NZ2GN2B-60DA4		
First module, Second module			Second module		
Model name	Device No.	Item	Device No.	Item	
Main module	RY9	Initial data setting request flag	RY9	Initial data setting request flag	*1
	RYA	Error clear request flag	RYA	Error clear request flag	In the model to be replaced, a warning is automatically cleared after the cause has been resolved. In the alternative model, a minor error is not automatically cleared. Turning on the Error clear request flag after the cause has been resolved clears the error.*1
	RY10	CH1 Output enable/disable flag	—	—	—
	RY11	CH2 Output enable/disable flag	—	—	
	RY12	CH3 Output enable/disable flag	—	—	
	RY13	CH4 Output enable/disable flag	—	—	
	RY19	Trigger output request	—	—	
	RY1A	Trigger output completed clear request	—	—	
	RY1E	Warning output clear request flag	—	—	
	RY1F	External power supply monitor request flag (for extension output module)	—	—	
Extension module	RY20	CH1 Output enable/disable flag	RY10	CH1 Output enable/disable flag	—
	RY21	CH2 Output enable/disable flag	RY11	CH2 Output enable/disable flag	
	RY22	CH3 Output enable/disable flag	RY12	CH3 Output enable/disable flag	
	RY23	CH4 Output enable/disable flag	RY13	CH4 Output enable/disable flag	
	RY29	Trigger output request	—	—	If the area is used in the program, delete it.
	RY2A	Trigger output completed clear request	—	—	
	RY2E	Warning output clear request flag	RY1E	Warning output clear request flag	—

*1 The program needs to be modified to use devices of both the main module, to which the extension module to be replaced was connected, and the alternative model.

Remote register (RWr)

■When the extension module is connected to NZ2GF2BN-60AD4

Model to be replaced			Alternative model		Cautions on replacement
NZ2GF2BN-60AD4 NZ2EX2B-60DA4			NZ2GN2B-60DA4		
First module, Second module			Second module		
Model name	Device No.	Item	Device No.	Item	
Main module	RWr0	Latest error code	RWr0	Latest error code	The stored error code differs. For details, refer to the manual of each model.*1
	RWr1	Latest warning code	RWr1	Latest warning code	• The stored warning code and alarm code differ. For details, refer to the manual of each model. • In the model to be replaced, if a minor error (warning) other than alarms occurs, the Warning flag turns on and the warning code is stored to the Latest warning code. In the alternative model, if a minor error occurs, the Error flag turns on and the error code is stored to the Latest error code.*1
	RWr2	CH1 Digital operation value	—	—	—
	RWr3	CH2 Digital operation value	—	—	
	RWr4	CH3 Digital operation value	—	—	
	RWr5	CH4 Digital operation value	—	—	
	RWr6	CH1 Difference conversion reference value	—	—	
	RWr7	CH2 Difference conversion reference value	—	—	
	RWr8	CH3 Difference conversion reference value	—	—	
	RWr9	CH4 Difference conversion reference value	—	—	
	RWrA	Input signal error detection flag	—	—	
	RWrB	Warning output flag	—	—	
Extension module	RWr12	CH1 Set value check code	RWr2	CH1 Set value check code	—
	RWr13	CH2 Set value check code	RWr3	CH2 Set value check code	
	RWr14	CH3 Set value check code	RWr4	CH3 Set value check code	
	RWr15	CH4 Set value check code	RWr5	CH4 Set value check code	
	RWr1A	Warning output flag	RWrA	Warning output flag	

*1 The program needs to be modified to use devices of both the main module, to which the extension module to be replaced was connected, and the alternative model.

■When the extension module is connected to NZ2GF2BN-60DA4

Model to be replaced			Alternative model		Cautions on replacement
NZ2GF2BN-60DA4 NZ2EX2B-60DA4			NZ2GN2B-60DA4		
First module, Second module			Second module		
Model name	Device No.	Item	Device No.	Item	
Main module	RWr0	Latest error code	RWr0	Latest error code	The stored error code differs. For details, refer to the manual of each model.*1
	RWr1	Latest warning code	RWr1	Latest warning code	• The stored warning code and alarm code differ. For details, refer to the manual of each model. • In the model to be replaced, if a minor error (warning) other than alarms occurs, the Warning flag turns on and the warning code is stored to the Latest warning code. In the alternative model, if a minor error occurs, the Error flag turns on and the error code is stored to the Latest error code.*1
	RWr2	CH1 Set value check code	—	—	—
	RWr3	CH2 Set value check code	—	—	
	RWr4	CH3 Set value check code	—	—	
	RWr5	CH4 Set value check code	—	—	
	RWrA	Warning output flag	—	—	
Extension module	RWr12	CH1 Set value check code	RWr2	CH1 Set value check code	—
	RWr13	CH2 Set value check code	RWr3	CH2 Set value check code	
	RWr14	CH3 Set value check code	RWr4	CH3 Set value check code	
	RWr15	CH4 Set value check code	RWr5	CH4 Set value check code	
	RWr1A	Warning output flag	RWrA	Warning output flag	

*1 The program needs to be modified to use devices of both the main module, to which the extension module to be replaced was connected, and the alternative model.

Remote register (RWw)

■When the extension module is connected to NZ2GF2BN-60AD4

Model to be replaced			Alternative model		Cautions on replacement
NZ2GF2BN-60AD4 NZ2EX2B-60DA4			NZ2GN2B-60DA4		
First module, Second module			Second module		
Model name	Device No.	Item	Device No.	Item	
Main module	RWw2	CH1 Conversion value shift amount	—	—	—
	RWw3	CH2 Conversion value shift amount	—	—	
	RWw4	CH3 Conversion value shift amount	—	—	
	RWw5	CH4 Conversion value shift amount	—	—	
Extension module	RWw12	CH1 Digital value	RWw2	CH1 Digital value	The digital value range differs between the model to be replaced and the alternative model in the range of 0 to 5V, 1 to 5V, 0 to 20mA, and 4 to 20mA. • Model to be replaced: 0 to 12000 • Alternative model: 0 to 16000
	RWw13	CH2 Digital value	RWw3	CH2 Digital value	
	RWw14	CH3 Digital value	RWw4	CH3 Digital value	
	RWw15	CH4 Digital value	RWw5	CH4 Digital value	
	RWw16	CH1 Shifting set value	RWw10	CH1 Shifting set value	—
	RWw17	CH2 Shifting set value	RWw11	CH2 Shifting set value	
	RWw18	CH3 Shifting set value	RWw12	CH3 Shifting set value	
	RWw19	CH4 Shifting set value	RWw13	CH4 Shifting set value	

■When the extension module is connected to NZ2GF2BN-60DA4

Model to be replaced			Alternative model		Cautions on replacement
NZ2GF2BN-60DA4 NZ2EX2B-60DA4			NZ2GN2B-60DA4		
First module, Second module			Second module		
Model name	Device No.	Item	Device No.	Item	
Main module	RWw2	CH1 Digital value	—	—	—
	RWw3	CH2 Digital value	—	—	
	RWw4	CH3 Digital value	—	—	
	RWw5	CH4 Digital value	—	—	
	RWw6	CH1 Shifting set value	—	—	
	RWw7	CH2 Shifting set value	—	—	
	RWw8	CH3 Shifting set value	—	—	
	RWw9	CH4 Shifting set value	—	—	
Extension module	RWw12	CH1 Digital value	RWw2	CH1 Digital value	The digital value range differs between the model to be replaced and the alternative model in the range of 0 to 5V, 1 to 5V, 0 to 20mA, and 4 to 20mA. • Model to be replaced: 0 to 12000 • Alternative model: 0 to 16000
	RWw13	CH2 Digital value	RWw3	CH2 Digital value	
	RWw14	CH3 Digital value	RWw4	CH3 Digital value	
	RWw15	CH4 Digital value	RWw5	CH4 Digital value	
	RWw16	CH1 Shifting set value	RWw10	CH1 Shifting set value	—
	RWw17	CH2 Shifting set value	RWw11	CH2 Shifting set value	
	RWw18	CH3 Shifting set value	RWw12	CH3 Shifting set value	
	RWw19	CH4 Shifting set value	RWw13	CH4 Shifting set value	

3.7 Comparison of Remote Buffer Memory

Some remote buffer memory areas may have different locations or may not be available on the CC-Link IE TSN A/D or D/A converter module (CC-Link IE Field Network communication mode).

Point

It is recommended to set module parameters in the "Device Station Parameter Processing" settings window of the engineering tool.
When setting parameters via program, refer to the manual and modify the parameter setting program.
When replacing an extension module, if setting parameters via program, initialize the parameters related to the extension module (including the extension module identification codes) that are set for the main module to which the extension module was connected.

Point

When replacing a main module, change the remote buffer memory areas used in the program to the remote buffer memory areas of the alternative model. If two alternative models are used, the program needs to be modified to use remote buffer memory areas of both models.
Also, modify the program so that monitoring, configuration, and control for one module can be performed on each of the two alternative models.

Main A/D converter modules

Monitoring area

Model to be replaced		Alternative model				Cautions on replacement
NZ2GFCE-60ADV8, NZ2GFCE-60ADI8		NZ2GN2S-60AD4				
		First module		Second module		
Address	Item	Address	Item	Address	Item	
1536	CH1 Maximum value	1536	CH1 Maximum value	—	—	In the model to be replaced, turning on and off Initial data setting request flag (RY9) allows the values to be updated to the current values. But in the alternative model, it allows the values to be updated to 0. Set the maximum/minimum value of CH5 or later in the model to be replaced to the maximum/minimum value of the second alternative model.
1537	CH1 Minimum value	1537	CH1 Minimum value	—	—	
1538	CH2 Maximum value	1538	CH2 Maximum value	—	—	
1539	CH2 Minimum value	1539	CH2 Minimum value	—	—	
1540	CH3 Maximum value	1540	CH3 Maximum value	—	—	
1541	CH3 Minimum value	1541	CH3 Minimum value	—	—	
1542	CH4 Maximum value	1542	CH4 Maximum value	—	—	
1543	CH4 Minimum value	1543	CH4 Minimum value	—	—	
1544	CH5 Maximum value	—	—	1536	CH1 Maximum value	
1545	CH5 Minimum value	—	—	1537	CH1 Minimum value	
1546	CH6 Maximum value	—	—	1538	CH2 Maximum value	
1547	CH6 Minimum value	—	—	1539	CH2 Minimum value	
1548	CH7 Maximum value	—	—	1540	CH3 Maximum value	
1549	CH7 Minimum value	—	—	1541	CH3 Minimum value	
1550	CH8 Maximum value	—	—	1542	CH4 Maximum value	
1551	CH8 Minimum value	—	—	1543	CH4 Minimum value	
1552	Setting range monitor (CH1 to CH4)	1552	Setting range monitor	—	—	—
1553	Setting range monitor (CH5 to CH8)	—	—	1552	Setting range monitor	

Error history area

Model to be replaced			Alternative model						Cautions on replacement
NZ2GFCE-60ADV8, NZ2GFCE-60ADI8			NZ2GN2S-60AD4						
			First module			Second module			
Address	Item		Address	Item		Address	Item		
2560	Error history data 1	Error code	2560	Error history data 1	Error code	2560	Error history data 1	Error code	The stored error code differs. For details, refer to the manual of each model.*1
2561		Order of occurrence	2561		Order of occurrence	2561		Order of occurrence	*1
2562		[Error time] Western calendar year	2562		[Error time] Western calendar year	2562		[Error time] Western calendar year	
2563		[Error time] Month/ Day	2563		[Error time] Month/ Day	2563		[Error time] Month/ Day	
2564		[Error time] Hour/ Minute	2564		[Error time] Hour/ Minute	2564		[Error time] Hour/ Minute	
2565		[Error time] Second/ 00H (fixed)	2565		[Error time] Second/ 00H (fixed)	2565		[Error time] Second/ 00H (fixed)	
2566		CH1 Digital operation value	—		—	—		—	If the area is used in the program, delete it.
2567		CH2 Digital operation value	—		—	—		—	
2568		CH3 Digital operation value	—		—	—		—	
2569		CH4 Digital operation value	—		—	—		—	
2570		CH5 Digital operation value	—		—	—		—	
2571		CH6 Digital operation value	—		—	—		—	
2572		CH7 Digital operation value	—		—	—		—	
2573		CH8 Digital operation value	—		—	—		—	
2574 to 2575		System area	—		—	—		—	—

Model to be replaced		Alternative model				Cautions on replacement
NZ2GFCE-60ADV8, NZ2GFCE-60ADI8		NZ2GN2S-60AD4				
		First module		Second module		
Address	Item	Address	Item	Address	Item	
2576 to 2591	Error history data 2	2576 to 2591	Error history data 2	2576 to 2591	Error history data 2	Refer to Error history data 1.
2592 to 2607	Error history data 3	2592 to 2607	Error history data 3	2592 to 2607	Error history data 3	
2608 to 2623	Error history data 4	2608 to 2623	Error history data 4	2608 to 2623	Error history data 4	
2624 to 2639	Error history data 5	2624 to 2639	Error history data 5	2624 to 2639	Error history data 5	
2640 to 2655	Error history data 6	2640 to 2655	Error history data 6	2640 to 2655	Error history data 6	
2656 to 2671	Error history data 7	2656 to 2671	Error history data 7	2656 to 2671	Error history data 7	
2672 to 2687	Error history data 8	2672 to 2687	Error history data 8	2672 to 2687	Error history data 8	
2688 to 2703	Error history data 9	2688 to 2703	Error history data 9	2688 to 2703	Error history data 9	
2704 to 2719	Error history data 10	2704 to 2719	Error history data 10	2704 to 2719	Error history data 10	
2720 to 2735	Error history data 11	2720 to 2735	Error history data 11	2720 to 2735	Error history data 11	
2736 to 2751	Error history data 12	2736 to 2751	Error history data 12	2736 to 2751	Error history data 12	
2752 to 2767	Error history data 13	2752 to 2767	Error history data 13	2752 to 2767	Error history data 13	
2768 to 2783	Error history data 14	2768 to 2783	Error history data 14	2768 to 2783	Error history data 14	
2784 to 2799	Error history data 15	2784 to 2799	Error history data 15	2784 to 2799	Error history data 15	

*1 The program needs to be modified to use remote buffer memory areas of both alternative models.

Module control data area

Model to be replaced		Alternative model				Cautions on replacement
NZ2GFCE-60ADV8, NZ2GFCE-60ADI8		NZ2GN2S-60AD4				
		First module		Second module		
Address	Item	Address	Item	Address	Item	
4096	Error history clear command	4096	Error history clear command	4096	Error history clear command	*1
4097	Error history clear completed	4097	Error history clear completed	4097	Error history clear completed	
4098	Parameter area initialization command	4098	Parameter area initialization command	4098	Parameter area initialization command	
4099	Parameter area initialization completed	4099	Parameter area initialization completed	4099	Parameter area initialization completed	

*1 The program needs to be modified to use remote buffer memory areas of both alternative models.

Main D/A converter modules

Monitoring area

Model to be replaced		Alternative model				Cautions on replacement
NZ2GFCE-60DAV8, NZ2GFCE-60DAI8		NZ2GN2S-60DA4				
		First module		Second module		
Address	Item	Address	Item	Address	Item	
1536	Setting range monitor (CH1 to CH4)	1536	Setting range monitor	—	—	—
1537	Setting range monitor (CH5 to CH8)	—	—	1536	Setting range monitor	

Error history area

Model to be replaced			Alternative model						Cautions on replacement
NZ2GFCE-60DAV8, NZ2GFCE-60DAI8			NZ2GN2S-60DA4						
			First module			Second module			
Address	Item		Address	Item		Address	Item		
2560	Error history data 1	Error code	2560	Error history data 1	Error code	2560	Error history data 1	Error code	The stored error code differs. For details, refer to the manual of each model.*1
2561		Order of occurrence	2561		Order of occurrence	2561		Order of occurrence	*1
2562		[Error time] Western calendar year	2562		[Error time] Western calendar year	2562		[Error time] Western calendar year	
2563		[Error time] Month/Day	2563		[Error time] Month/Day	2563		[Error time] Month/Day	
2564		[Error time] Hour/Minute	2564		[Error time] Hour/Minute	2564		[Error time] Hour/Minute	
2565		[Error time] Second/00H (fixed)	2565		[Error time] Second/00H (fixed)	2565		[Error time] Second/00H (fixed)	
2566		CH1 Digital value	—		—	—		—	If the area is used in the program, delete it.
2567		CH2 Digital value	—		—	—		—	
2568		CH3 Digital value	—		—	—		—	
2569		CH4 Digital value	—		—	—		—	
2570		CH5 Digital value	—		—	—		—	
2571		CH6 Digital value	—		—	—		—	
2572		CH7 Digital value	—		—	—		—	
2573		CH8 Digital value	—		—	—		—	
2574 to 2575		System area	—		—	—		—	—

Model to be replaced		Alternative model				Cautions on replacement
NZ2GFCE-60DAV8, NZ2GFCE-60DAI8		NZ2GN2S-60DA4				
		First module		Second module		
Address	Item	Address	Item	Address	Item	
2576 to 2591	Error history data 2	2576 to 2591	Error history data 2	2576 to 2591	Error history data 2	Refer to Error history data 1.
2592 to 2607	Error history data 3	2592 to 2607	Error history data 3	2592 to 2607	Error history data 3	
2608 to 2623	Error history data 4	2608 to 2623	Error history data 4	2608 to 2623	Error history data 4	
2624 to 2639	Error history data 5	2624 to 2639	Error history data 5	2624 to 2639	Error history data 5	
2640 to 2655	Error history data 6	2640 to 2655	Error history data 6	2640 to 2655	Error history data 6	
2656 to 2671	Error history data 7	2656 to 2671	Error history data 7	2656 to 2671	Error history data 7	
2672 to 2687	Error history data 8	2672 to 2687	Error history data 8	2672 to 2687	Error history data 8	
2688 to 2703	Error history data 9	2688 to 2703	Error history data 9	2688 to 2703	Error history data 9	
2704 to 2719	Error history data 10	2704 to 2719	Error history data 10	2704 to 2719	Error history data 10	
2720 to 2735	Error history data 11	2720 to 2735	Error history data 11	2720 to 2735	Error history data 11	
2736 to 2751	Error history data 12	2736 to 2751	Error history data 12	2736 to 2751	Error history data 12	
2752 to 2767	Error history data 13	2752 to 2767	Error history data 13	2752 to 2767	Error history data 13	
2768 to 2783	Error history data 14	2768 to 2783	Error history data 14	2768 to 2783	Error history data 14	
2784 to 2799	Error history data 15	2784 to 2799	Error history data 15	2784 to 2799	Error history data 15	

*1 The program needs to be modified to use remote buffer memory areas of both alternative models.

Module control data area

Model to be replaced		Alternative model				Cautions on replacement
NZ2GFCE-60DAV8, NZ2GFCE-60DAI8		NZ2GN2S-60DA4				
		First module		Second module		
Address	Item	Address	Item	Address	Item	
4096	Error history clear command	4096	Error history clear command	4096	Error history clear command	*1
4097	Error history clear completed	4097	Error history clear completed	4097	Error history clear completed	
4098	Parameter area initialization command	4098	Parameter area initialization command	4098	Parameter area initialization command	
4099	Parameter area initialization completed	4099	Parameter area initialization completed	4099	Parameter area initialization completed	

*1 The program needs to be modified to use remote buffer memory areas of both alternative models.

Extension A/D converter modules

Point

The information provided applies when the main module is not replaced.
If you are considering replacing the main module, refer to the manual for the module.

Monitoring area

■When the extension module is connected to NZ2GF2BN-60AD4

Model to be replaced			Alternative model		Cautions on replacement
NZ2GF2BN-60AD4 NZ2EX2B-60AD4			NZ2GN2B-60AD4		
First module, Second module			Second module		
Model name	Address	Item	Address	Item	
Main module	1537	CH1 Maximum value	—	—	—
	1538	CH1 Minimum value	—	—	
	1539	CH2 Maximum value	—	—	
	1540	CH2 Minimum value	—	—	
	1541	CH3 Maximum value	—	—	
	1542	CH3 Minimum value	—	—	
	1543	CH4 Maximum value	—	—	
	1544	CH4 Minimum value	—	—	
Extension module	1792	Extension module identification code	—	—	If the area is used in the program, delete it.
	1793	CH1 Maximum value	1536	CH1 Maximum value	In the model to be replaced, turning on and off Initial data setting request flag (RY9) allows the values to be updated to the current values. But in the alternative model, it allows the values to be updated to 0.
	1794	CH1 Minimum value	1537	CH1 Minimum value	
	1795	CH2 Maximum value	1538	CH2 Maximum value	
	1796	CH2 Minimum value	1539	CH2 Minimum value	
	1797	CH3 Maximum value	1540	CH3 Maximum value	
	1798	CH3 Minimum value	1541	CH3 Minimum value	
	1799	CH4 Maximum value	1542	CH4 Maximum value	
	1800	CH4 Minimum value	1543	CH4 Minimum value	

■When the extension module is connected to NZ2GF2BN-60DA4

Model to be replaced			Alternative model		Cautions on replacement
NZ2GF2BN-60AD4, NZ2GF2BN-60DA4 NZ2EX2B-60AD4			NZ2GN2B-60AD4		
First module, Second module			Second module		
Model name	Address	Item	Address	Item	
Extension module	1792	Extension module identification code	—	—	If the area is used in the program, delete it.
	1793	CH1 Maximum value	1536	CH1 Maximum value	In the model to be replaced, turning on and off Initial data setting request flag (RY9) allows the values to be updated to the current values. But in the alternative model, it allows the values to be updated to 0.
	1794	CH1 Minimum value	1537	CH1 Minimum value	
	1795	CH2 Maximum value	1538	CH2 Maximum value	
	1796	CH2 Minimum value	1539	CH2 Minimum value	
	1797	CH3 Maximum value	1540	CH3 Maximum value	
	1798	CH3 Minimum value	1541	CH3 Minimum value	
	1799	CH4 Maximum value	1542	CH4 Maximum value	
	1800	CH4 Minimum value	1543	CH4 Minimum value	

Error history area

■When the extension module is connected to NZ2GF2BN-60AD4

Model to be replaced				Alternative model			Cautions on replacement
NZ2GF2BN-60AD4 NZ2EX2B-60AD4				NZ2GN2B-60AD4			
First module, Second module				Second module			
Model name	Address	Item		Address	Item		
Main module	2560	Error history data 1	Error code	2560	Error history data 1	Error code	The stored error code differs. For details, refer to the manual of each model.*1
	2561		Order of occurrence	2561		Order of occurrence	
	2562		[Error time] Western calendar year	2562		[Error time] Western calendar year	
	2563		[Error time] Month/Day	2563		[Error time] Month/Day	
	2564		[Error time] Hour/Minute	2564		[Error time] Hour/Minute	
	2565		[Error time] Second/00H (fixed)	2565		[Error time] Second/00H (fixed)	
	2566		CH1 Digital operation value	—		—	If the area is used in the program, delete it.
	2567		CH2 Digital operation value	—		—	
	2568		CH3 Digital operation value	—		—	
	2569		CH4 Digital operation value	—		—	
	2570 to 2575		System area	—		—	—
	2576 to 2591	Error history data 2		2576 to 2591	Error history data 2		Refer to Error history data 1.
	2592 to 2607	Error history data 3		2592 to 2607	Error history data 3		
	2608 to 2623	Error history data 4		2608 to 2623	Error history data 4		
	2624 to 2639	Error history data 5		2624 to 2639	Error history data 5		
	2640 to 2655	Error history data 6		2640 to 2655	Error history data 6		
	2656 to 2671	Error history data 7		2656 to 2671	Error history data 7		
	2672 to 2687	Error history data 8		2672 to 2687	Error history data 8		
	2688 to 2703	Error history data 9		2688 to 2703	Error history data 9		
	2704 to 2719	Error history data 10		2704 to 2719	Error history data 10		
	2720 to 2735	Error history data 11		2720 to 2735	Error history data 11		
	2736 to 2751	Error history data 12		2736 to 2751	Error history data 12		
	2752 to 2767	Error history data 13		2752 to 2767	Error history data 13		
	2768 to 2783	Error history data 14		2768 to 2783	Error history data 14		
	2784 to 2799	Error history data 15		2784 to 2799	Error history data 15		

*1 The program needs to be modified to use remote buffer memory areas of both the main module, to which the extension module to be replaced was connected, and the alternative model.

■When the extension module is connected to NZ2GF2BN-60DA4

Model to be replaced				Alternative model			Cautions on replacement
NZ2GF2BN-60DA4 NZ2EX2B-60AD4				NZ2GN2B-60AD4			
First module, Second module				Second module			
Model name	Address	Item		Address	Item		
Main module	2560	Error history data 1	Error code	2560	Error history data 1	Error code	The stored error code differs. For details, refer to the manual of each model.*1
	2561		Order of occurrence	2561		Order of occurrence	
	2562		[Error time] Western calendar year	2562		[Error time] Western calendar year	
	2563		[Error time] Month/Day	2563		[Error time] Month/Day	
	2564		[Error time] Hour/Minute	2564		[Error time] Hour/Minute	
	2565		[Error time] Second/00H (fixed)	2565		[Error time] Second/00H (fixed)	
	2566		CH1 Digital value	—		—	If the area is used in the program, delete it.
	2567		CH2 Digital value	—		—	
	2568		CH3 Digital value	—		—	
	2569		CH4 Digital value	—		—	
	2570 to 2575		System area	—		—	—
	2576 to 2591	Error history data 2		2576 to 2591	Error history data 2		Refer to Error history data 1.
	2592 to 2607	Error history data 3		2592 to 2607	Error history data 3		
	2608 to 2623	Error history data 4		2608 to 2623	Error history data 4		
	2624 to 2639	Error history data 5		2624 to 2639	Error history data 5		
	2640 to 2655	Error history data 6		2640 to 2655	Error history data 6		
	2656 to 2671	Error history data 7		2656 to 2671	Error history data 7		
	2672 to 2687	Error history data 8		2672 to 2687	Error history data 8		
	2688 to 2703	Error history data 9		2688 to 2703	Error history data 9		
	2704 to 2719	Error history data 10		2704 to 2719	Error history data 10		
	2720 to 2735	Error history data 11		2720 to 2735	Error history data 11		
	2736 to 2751	Error history data 12		2736 to 2751	Error history data 12		
	2752 to 2767	Error history data 13		2752 to 2767	Error history data 13		
	2768 to 2783	Error history data 14		2768 to 2783	Error history data 14		
	2784 to 2799	Error history data 15		2784 to 2799	Error history data 15		

*1 The program needs to be modified to use remote buffer memory areas of both the main module, to which the extension module to be replaced was connected, and the alternative model.

Module control data area

Model to be replaced			Alternative model		Cautions on replacement
NZ2GF2BN-60AD4, NZ2GF2BN-60DA4 NZ2EX2B-60AD4			NZ2GN2B-60AD4		
First module, Second module			Second module		
Model name	Address	Item	Address	Item	
Main module	4096	Error history clear command	4096	Error history clear command	—
	4097	Error history clear completed	4097	Error history clear completed	
	4098	Parameter area initialization command	4098	Parameter area initialization command	
	4099	Parameter area initialization completed	4099	Parameter area initialization completed	
	4100	Module operation information initialization command	—	—	If the area is used in the program, delete it.
	4101	Module operation information initialization completed	—	—	

Extension D/A converter modules

Point

The information provided applies when the main module is not replaced.
If you are considering replacing the main module, refer to the manual for the module.

Monitoring area

■When the extension module is connected to NZ2GF2BN-60AD4

Model to be replaced			Alternative model		Cautions on replacement
NZ2GF2BN-60AD4 NZ2EX2B-60DA4			NZ2GN2B-60DA4		
First module, Second module			Second module		
Model name	Address	Item	Address	Item	
Main module	1537	CH1 Maximum value	—	—	—
	1538	CH1 Minimum value	—	—	
	1539	CH2 Maximum value	—	—	
	1540	CH2 Minimum value	—	—	
	1541	CH3 Maximum value	—	—	
	1542	CH3 Minimum value	—	—	
	1543	CH4 Maximum value	—	—	
	1544	CH4 Minimum value	—	—	
Extension module	1792	Extension module identification code	—	—	If the area is used in the program, delete it.

■When the extension module is connected to NZ2GF2BN-60DA4

Model to be replaced			Alternative model		Cautions on replacement
NZ2GF2BN-60DA4 NZ2EX2B-60DA4			NZ2GN2B-60DA4		
First module, Second module			Second module		
Model name	Address	Item	Address	Item	
Extension module	1792	Extension module identification code	—	—	If the area is used in the program, delete it.

Error history area

■When the extension module is connected to NZ2GF2BN-60AD4

Model to be replaced				Alternative model			Cautions on replacement
NZ2GF2BN-60AD4 NZ2EX2B-60DA4				NZ2GN2B-60DA4			
First module, Second module				Second module			
Model name	Address	Item		Address	Item		
Main module	2560	Error history data 1	Error code	2560	Error history data 1	Error code	The stored error code differs. For details, refer to the manual of each model.*1
	2561		Order of occurrence	2561		Order of occurrence	
	2562		[Error time] Western calendar year	2562		[Error time] Western calendar year	
	2563		[Error time] Month/Day	2563		[Error time] Month/Day	
	2564		[Error time] Hour/Minute	2564		[Error time] Hour/Minute	
	2565		[Error time] Second/00H (fixed)	2565		[Error time] Second/00H (fixed)	
	2566		CH1 Digital operation value	—		—	If the area is used in the program, delete it.
	2567		CH2 Digital operation value	—		—	
	2568		CH3 Digital operation value	—		—	
	2569		CH4 Digital operation value	—		—	
	2574 to 2575		System area	—		—	—
	2576 to 2591	Error history data 2		2576 to 2591	Error history data 2		Refer to Error history data 1.
	2592 to 2607	Error history data 3		2592 to 2607	Error history data 3		
	2608 to 2623	Error history data 4		2608 to 2623	Error history data 4		
	2624 to 2639	Error history data 5		2624 to 2639	Error history data 5		
	2640 to 2655	Error history data 6		2640 to 2655	Error history data 6		
	2656 to 2671	Error history data 7		2656 to 2671	Error history data 7		
	2672 to 2687	Error history data 8		2672 to 2687	Error history data 8		
	2688 to 2703	Error history data 9		2688 to 2703	Error history data 9		
	2704 to 2719	Error history data 10		2704 to 2719	Error history data 10		
	2720 to 2735	Error history data 11		2720 to 2735	Error history data 11		
	2736 to 2751	Error history data 12		2736 to 2751	Error history data 12		
	2752 to 2767	Error history data 13		2752 to 2767	Error history data 13		
	2768 to 2783	Error history data 14		2768 to 2783	Error history data 14		
	2784 to 2799	Error history data 15		2784 to 2799	Error history data 15		

*1 The program needs to be modified to use remote buffer memory areas of both the main module, to which the extension module to be replaced was connected, and the alternative model.

■When the extension module is connected to NZ2GF2BN-60DA4

Model to be replaced				Alternative model			Cautions on replacement
NZ2GF2BN-60DA4 NZ2EX2B-60DA4				NZ2GN2B-60DA4			
First module, Second module				Second module			
Model name	Address	Item		Address	Item		
Main module	2560	Error history data 1	Error code	2560	Error history data 1	Error code	The stored error code differs. For details, refer to the manual of each model.*1
	2561		Order of occurrence	2561		Order of occurrence	
	2562		[Error time] Western calendar year	2562		[Error time] Western calendar year	
	2563		[Error time] Month/Day	2563		[Error time] Month/Day	
	2564		[Error time] Hour/Minute	2564		[Error time] Hour/Minute	
	2565		[Error time] Second/00H (fixed)	2565		[Error time] Second/00H (fixed)	
	2566		CH1 Digital value	—		—	If the area is used in the program, delete it.
	2567		CH2 Digital value	—		—	
	2568		CH3 Digital value	—		—	
	2569		CH4 Digital value	—		—	
	2574 to 2575		System area	—		—	—
	2576 to 2591	Error history data 2		2576 to 2591	Error history data 2		Refer to Error history data 1.
	2592 to 2607	Error history data 3		2592 to 2607	Error history data 3		
	2608 to 2623	Error history data 4		2608 to 2623	Error history data 4		
	2624 to 2639	Error history data 5		2624 to 2639	Error history data 5		
	2640 to 2655	Error history data 6		2640 to 2655	Error history data 6		
	2656 to 2671	Error history data 7		2656 to 2671	Error history data 7		
	2672 to 2687	Error history data 8		2672 to 2687	Error history data 8		
	2688 to 2703	Error history data 9		2688 to 2703	Error history data 9		
	2704 to 2719	Error history data 10		2704 to 2719	Error history data 10		
	2720 to 2735	Error history data 11		2720 to 2735	Error history data 11		
	2736 to 2751	Error history data 12		2736 to 2751	Error history data 12		
	2752 to 2767	Error history data 13		2752 to 2767	Error history data 13		
	2768 to 2783	Error history data 14		2768 to 2783	Error history data 14		
	2784 to 2799	Error history data 15		2784 to 2799	Error history data 15		

*1 The program needs to be modified to use remote buffer memory areas of both the main module, to which the extension module to be replaced was connected, and the alternative model.

Module control data area

Model to be replaced			Alternative model		Cautions on replacement
NZ2GF2BN-60AD4, NZ2GF2BN-60DA4 NZ2EX2B-60DA4			NZ2GN2B-60DA4		
First module, Second module			Second module		
Model name	Address	Item	Address	Item	
Main module	4096	Error history clear command	4096	Error history clear command	—
	4097	Error history clear completed	4097	Error history clear completed	
	4098	Parameter area initialization command	4098	Parameter area initialization command	
	4099	Parameter area initialization completed	4099	Parameter area initialization completed	
	4100	Module operation information initialization command	—	—	If the area is used in the program, delete it.
	4101	Module operation information initialization completed	—	—	If the area is used in the program, delete it.

4 PROCEDURE FOR REPLACING THE MODULES

The procedure for replacing the modules is shown below.

Operating procedure	Description
1. Storage of module parameters	Export the module parameters. For details, refer to the manual for that specific module.
2. Setting of IP address/station number setting switches	Set the station number of the module after replacement. ☞Page 53 Setting of Station Number Using IP Address/Station Number Setting Switches
3. Setting of function setting switch	Set the function setting switch of the module after replacement. ☞Page 54 Function Setting Using Function Setting Switches
4. Replacement of module	Replace the module. For instructions on installing or removing each module, refer to the manual for that specific module.
5. Rewiring of cables	Connect the module power supply, Ethernet cables, and external devices. ☞Page 55 Rewiring of Cables
6. Change of parameters and programs	Change the parameters and programs by using engineering tools. ☞Page 55 Change of Parameters and Programs
7. Restart of control	Check the module status via the LED, then restart the control. (RUN LED and D LINK LED are lit and ERR. LED is off.)

4.1 Setting of Station Number Using IP Address/Station Number Setting Switches

About the station number setting value

The station number should be set to a value that does not overlap with other stations.

When replacing an 8-channel main module with two 4-channel main modules, configure the following settings.

- First module: Set the station number of the model to be replaced.
- Second module: Set the station number that does not overlap with other stations.

When replacing an extension module with a main module, set the station number of the new main module to a value that does not overlap with any other stations.

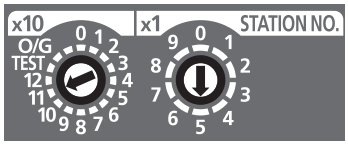
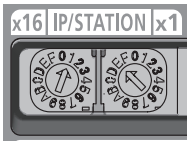
Comparison of IP address/station number setting switches

Set the station number by using the IP address/station number setting switches on the front of the module.

For the CC-Link IE Field Network A/D or D/A converter module, the switches with decimal number are used. For the CC-Link IE TSN A/D or D/A converter module, however, the switches with hexadecimal number are used.

The setting value of the station number becomes valid when the module is powered on. Thus, set the station number when the module is powered off.

The following describes how to set the station number for each of the CC-Link IE Field Network A/D or D/A converter module and the CC-Link IE TSN A/D or D/A converter module using the switches.

CC-Link IE Field Network A/D or D/A converter module	CC-Link IE TSN A/D or D/A converter module
When setting the station number to 115 • The hundreds and tens places of the station number are set using the x10 switch. • The ones place of the station number is set using the x1 switch.	When setting the station number to 30 Set the station number by combining x1 and x16 (hexadecimal) switches. For how to set the switches corresponding to the decimal station number, refer to the following.
	

Setting of IP address/station number switches

This section describes how to set the IP address/station number switches on the CC-Link IE TSN A/D or D/A converter module.

Combinations of x1 and x16 (hexadecimal) switches are as follows.

Set a value between 1 and 120. When a value outside this range is set, an error occurs and the DATA LINK LED flashes.

x16 \ x1	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
3	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
4	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
5	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
6	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111
7	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127
8	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143
9	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159
A	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175
B	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191
C	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207
D	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223
E	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239
F	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255

4.2 Function Setting Using Function Setting Switches

Set functions by using the function setting switches on the front of the module.

Set the function setting switches on the CC-Link IE TSN A/D or D/A converter module as shown below.

Switch name		Setting value	Function name
Function setting switch 1	NETWORK	On	Network setting function
Function setting switch 2	RANGE ON/OFF	Off	Input range switch enable/disable setting
Function setting switch 3	RANGE CH1	Off	Range switching function
Function setting switch 4		Off	
Function setting switch 5	RANGE CH2	Off	
Function setting switch 6		Off	
Function setting switch 7	RANGE CH3	Off	
Function setting switch 8		Off	
Function setting switch 9	RANGE CH4	Off	
Function setting switch 10		Off	

4.3 Rewiring of Cables

After disconnecting the cables from the existing module, reconnect them to the new module.

For how to disconnect the cables, refer to the manuals for each module used.

4.4 Change of Parameters and Programs

Change of network configuration setting

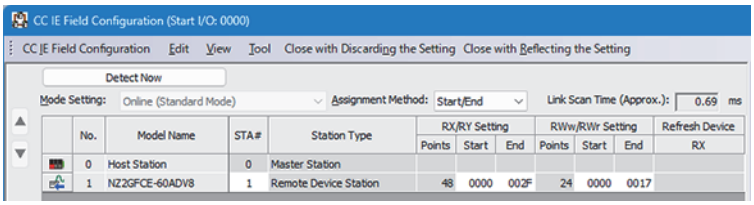
A profile is required for each model to be replaced.

Also, the replacement procedure differs depending on the alternative model. Refer to the following table.

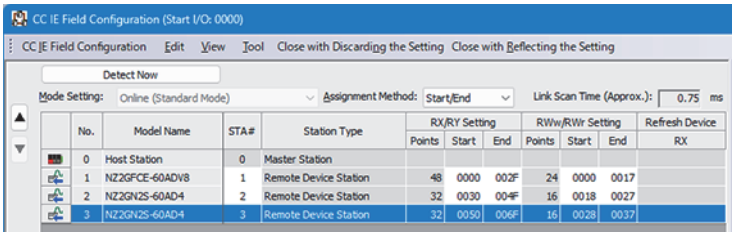
CC-Link IE Field Network A/D or D/A converter module		CC-Link IE TSN A/D or D/A converter module		Reference
Model	**Station type**	**Model**	**Station type**	
NZ2GFCE-60ADV8	Remote device station	Two NZ2GN2S-60AD4	Remote device station	Page 56 When replacing an 8-channel main module with two 4-channel main modules
NZ2GFCE-60ADI8	Remote device station	Two NZ2GN2S-60AD4	Remote device station	
NZ2GFCE-60DAV8	Remote device station	Two NZ2GN2S-60DA4	Remote device station	
NZ2GFCE-60DAI8	Remote device station	Two NZ2GN2S-60DA4	Remote device station	
NZ2EX2B-60AD4	Remote device station	NZ2GN2B-60AD4	Remote device station	Page 57 When replacing a 4-channel extension module with a 4-channel main module
NZ2EX2B-60DA4	Remote device station	NZ2GN2B-60DA4	Remote device station	

When replacing an 8-channel main module with two 4-channel main modules

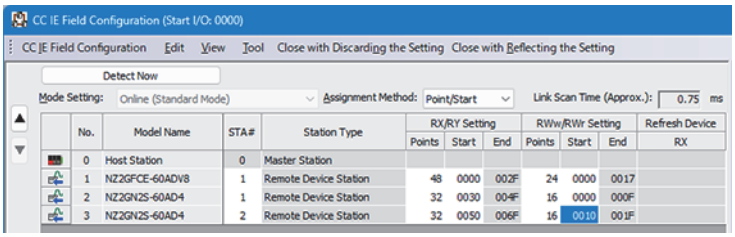
1. Open the "CC IE Field Configuration" window from "Network Configuration Setting" in the master station.



2. Add the alternative model.



3. Change the station number, and set RX/RY and RWw/RWr. For the first module, set the station number to match the number of the model to be replaced. For the second module, set the station number that does not overlap with any other stations. For the first module, set the "Start" values of "RX/RY Setting" and "RWw/RWr Setting" to match the values of the model to be replaced. For the second module, set the values that does not overlap with any other stations.

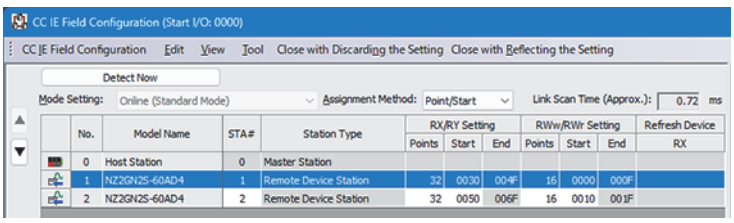


Point

When an 8-channel main module is replaced with two 4-channel main modules, required RX/RY and RWw/RWr assignment points will increase.
Therefore, it is not possible to configure the two alternative models with the same assignments as the model to be replaced, so the second module should be set with the different assignments.

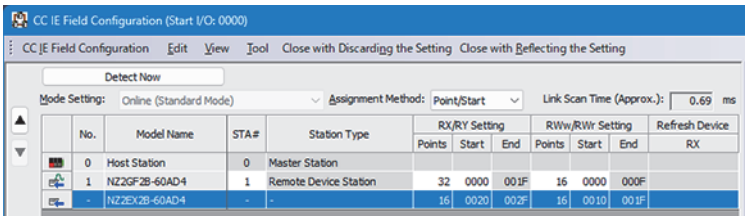
Model to be replaced			Alternative model		
Model	**Number of modules**	**Number of points (default)**	**Model**	**Number of modules**	**Number of points (default)**
NZ2GFCE-60ADV8 NZ2GFCE-60ADI8	1	RX/RY: 48 RWw/RWr: 24	NZ2GN2S-60AD4	2	RX/RY: Total 64 (32 per module) RWw/RWr: Total 32 (16 per module)
NZ2GFCE-60DAV8 NZ2GFCE-60DAI8	1	RX/RY: 32 RWw/RWr: 24	NZ2GN2S-60DA4	2	RX/RY: Total 64 (32 per module) RWw/RWr: Total 64 (32 per module)

4. Delete the station to be replaced.

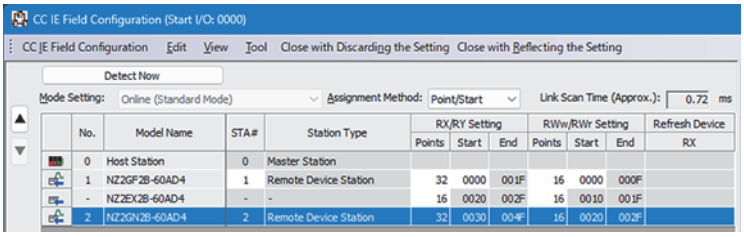


When replacing a 4-channel extension module with a 4-channel main module

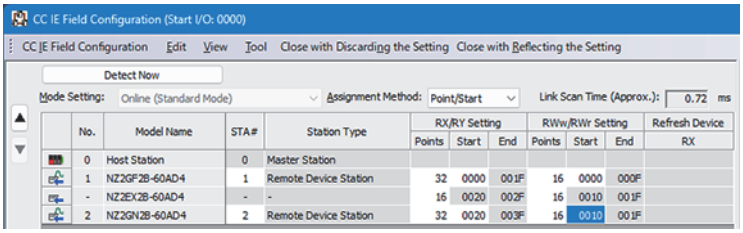
1. Open the "CC IE Field Configuration" window from "Network Configuration Setting" in the master station.



2. Add the alternative model.



3. Change the station number, and set RX/RY and RWw/RWr. Set "STA#", "RX/RY Setting", and "RWw/RWr Setting" to the values so that they does not overlap with any other stations.

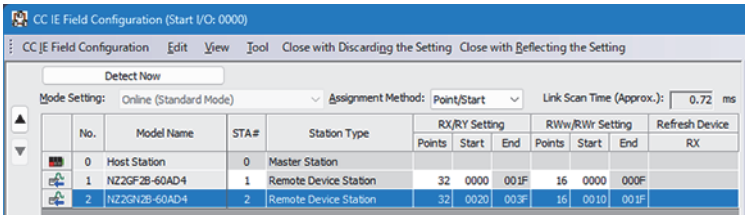


Point

For this replacement, required RX/RY and RWw/RWr assignment points may increase.
In this case, the alternative model cannot have the same assignment as the model to be replaced and requires a different assignment.

Model to be replaced			Alternative model		
Model	**Number of modules**	**Number of points (default)**	**Model**	**Number of modules**	**Number of points (default)**
NZ2EX2B-60AD4	1	RX/RY: 16 RWw/RWr: 16	NZ2GN2B-60AD4	1	RX/RY: 32 RWw/RWr: 16
NZ2EX2B-60DA4	1	RX/RY: 16 RWw/RWr: 16	NZ2GN2B-60DA4	1	RX/RY: 32 RWw/RWr: 32

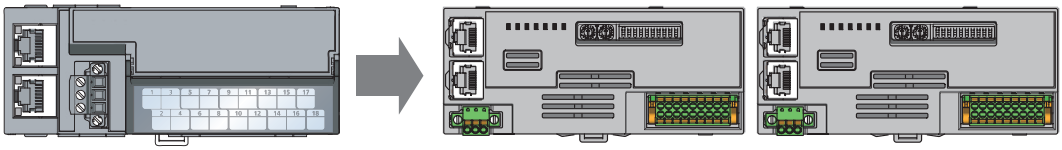
4. Delete the station to be replaced.



Change of module parameters

When replacing an 8-channel main module with two 4-channel main modules

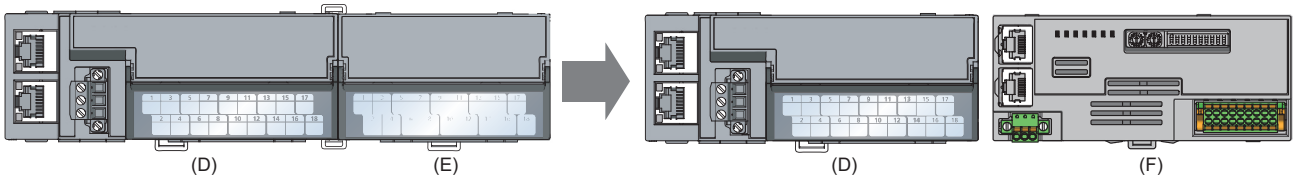
Parameters should be set for the two main modules that serves as alternative models.



Set the parameters of CH1 through CH4 in module A to match those of module B. Then, set the parameters of CH5 through CH8 in module A to match those of module C.
When using the iQ Sensor Solution data backup/restoration function in module A, perform a new backup in module B and C.

When replacing a 4-channel extension module with a 4-channel main module

Parameters should be set for the main module serving as the alternative model, as well as for the main module to which the model to be replaced was connected.



■Main module serving as the alternative model for the extension module (module F)

Set the parameters of CH1 through CH4 in module E to match those of module F.

■Main module to which the extension module was connected (module D)

Set the parameters to match those of the main module to which the extension module was connected.

Point

- Module D stores the parameters for using the extension module. Therefore, the parameter settings should be initialized when the extension module is removed. Failure to initialize the settings will cause an error (extension module parameter error).
- When parameters are set in the program, change the parameters to reset the extension module 1 areas (including the extension module identification code) of module-based parameters in module D to their default values.

When using the iQ Sensor Solution data backup/restoration function in module D, perform a new backup in module D and F.

Change of programs

Some remote I/O signals (RX, RY), remote register areas (RWr, RWw), and remote buffer memory areas in the link devices differ in assignment (device number) or specifications or cannot be used. As required, modify the program.
Especially when a main module is replaced, the program should be modified so that monitoring, configuration, and control for one module can be performed on each of the two alternative models.
Similarly, when an extension module is replaced, the program in the main module to which the extension module was connected should be modified to enable monitoring, configuration, and control of the main module serving as the alternative model for the extension module.

Point

Note that, for CH☐ Digital value (☐ = 1 to 8) of RWw of the D/A converter module, the setting range (practical setting range) may vary depending on the output range. Note that different analog output values may occur for the same setting value.
For precautions when replacing other devices, refer to the following.
☞ Page 17 Comparison of Link Devices (RX, RY, RWr, RWw)
☞ Page 40 Comparison of Remote Buffer Memory

REVISIONS

Version	Date of Issue	Revision
A	February 2026	First edition

TRADEMARKS