FA-A-0387-A

Production Discontinuation of CC-Link IE Field Network Waterproof/Dustproof Remote I/O Modules

■Date of Issue
September 2022
■Relevant Models
NZ2GF12A4-16D, NZ2GF12A4-16DE, NZ2GF12A2-16T, NZ2GF12A2-16TE, NZ2GF12A42-16DT, NZ2GF12A42-16DTE, NZ2GFS12A2-16DTE, NZ2GFS12A2-14DT

Thank you for your continued support of Mitsubishi Electric programmable controllers.
This technical bulletin informs you that the production of the following CC-Link IE Field Network waterproof/dustproof remote I/O modules will be discontinued.

1   MODELS TO BE DISCONTINUED

Product	Model	Type
CC-Link IE Field Network waterproof/dustproof remote I/O module	NZ2GF12A4-16D	Input module
	NZ2GF12A4-16DE	
	NZ2GF12A2-16T	Output module
	NZ2GF12A2-16TE	
	NZ2GF12A42-16DT	I/O combined module
	NZ2GF12A42-16DTE	
	NZ2GFS12A2-16DTE	Safety remote I/O module
	NZ2GFS12A2-14DT	

2   SCHEDULE

Order acceptance: Until October 31, 2022
Production discontinuation: March 31, 2023

3   REASON FOR DISCONTINUATION

Some parts of the above products are now obsolete, and we will have difficulty to maintain our production system.

4   REPAIR SUPPORT

The modules cannot be repaired due to their structure. We appreciate for your kind understanding. When a failure or detect occurs in those products due to the responsibility of Mitsubishi Electric, our company will exchange the product free of charge through the store where you purchased it or our representative.

MITSUBISHI ELECTRIC CORPORATION

5   ALTERNATIVE MODELS

Model to be discontinued		Alternative model	
Model	**Compatible network**	**Model**	**Compatible network**
NZ2GF12A4-16D	CC-Link IE Field Network	NZ2GN12A4-16D	CC-Link IE TSN CC-Link IE Field Network
NZ2GF12A4-16DE		NZ2GN12A4-16DE	
NZ2GF12A2-16T		NZ2GN12A2-16T	
NZ2GF12A2-16TE		NZ2GN12A2-16TE	
NZ2GF12A42-16DT		NZ2GN12A42-16DT	
NZ2GF12A42-16DTE		NZ2GN12A4-16DTE	
NZ2GFS12A2-16DTE		NZ2GNS12A2-16DTE	CC-Link IE TSN
NZ2GFS12A2-14DT		NZ2GNS12A2-14DT	

6   SPECIFICATIONS COMPARISON BETWEEN THE DISCONTINUED AND ALTERNATIVE MODELS

6.1   Input module

○: Compatible, △: Some changes

Item			Model to be discontinued **NZ2GF12A4-16D** **NZ2GF12A4-16DE**	Alternative model **NZ2GN12A4-16D** **NZ2GN12A4-16DE**	Compatibility	Impact of the change
Input specifications	Rated input current		7mA TYP.	7.3mA TYP.	○	—
	Input resistance		3.3kΩ	3.0kΩ	○	—
	ON voltage/ON current		15VDC or higher/3.5mA or higher	11VDC or higher/4mA or higher	△	Check that the connected device satisfies the ON/OFF condition.
	OFF voltage/OFF current		8VDC or lower/1.7mA or lower	5VDC or lower/1.5mA or lower	△	
	Input response time		0/0.5/1/1.5/5/10/20/70ms	0/0.2/1/1.5/5/10/20/70ms	△	If the setting value of 0.5 is used for the present model, other setting should be set for the alternative model.
Communications	Cyclic transmission	RX/RY points	16 points	16 points	○	—
		RWr/RWw points	12 points	4 points (Default)	△	The number of points and assignment differ. When using them in the program, delete the relevant items or change the devices to be assigned.
External dimensions	Height (H)		235mm	238mm	△	The external dimensions differ. Check the location space. (Also, the position of the mounting holes differs.)
	Width (W)		60mm	63mm		
	Depth (D)		38.5mm	37.5mm		

6.2   Output module

NZ2GF12A2-16T, NZ2GN12A2-16T

○: Compatible, △: Some changes

Item		Model to be discontinued	Alternative model	Compatibility	Impact of the change
		NZ2GF12A2-16T	NZ2GN12A2-16T		
Output specifications	Maximum load current	2A/1 point 8A/1 common	4A/1 point (Y0 to Y3)[*1] 2A/1 point (Y4 to YF) 12A/1 common	○	—
	Maximum voltage drop at ON	0.5A at 0.3VDC (TYP.) 0.5A at 0.6VDC (MAX.)	2A at 0.25VDC (TYP.) 2A at 0.5VDC (MAX.) 4A at 0.5VDC (TYP.) 4A at 1.0VDC (MAX.)	○	—
	Output response time	Off → On	0.5ms or less	0.5ms or less	○	When the output delay time is considered in the system design, the operation of the whole system should be reviewed.
		On → Off	1.5ms or less	0.8ms or less	△	
Communications	Cyclic transmission	RX/RY points	16 points	16 points	○	—
		RWr/RWw points	12 points	4 points (Default)	△	The number of points and assignment differ. When using them in the program, delete the relevant items or change the devices to be assigned.
External dimensions	Height (H)	235mm	238mm	△	The external dimensions differ. Check the location space. (Also, the position of the mounting holes differs.)
	Width (W)	60mm	63mm		
	Depth (D)	38.5mm	37.5mm		

*1   The total output current that flows through one connector should be 4A or less.

NZ2GF12A2-16TE, NZ2GN12A2-16TE

○: Compatible, △: Some changes

Item		Model to be discontinued	Alternative model	Compatibility	Impact of the change
		NZ2GF12A2-16TE	NZ2GN12A2-16TE		
Output specifications	Maximum load current	2A/1 point 8A/1 common	4A/1 point (Y0 to Y3)[*1] 2A/1 point (Y4 to YF) 12A/1 common	○	—
	Maximum voltage drop at ON	0.5A at 0.5VDC (TYP.) 0.5A at 0.8VDC (MAX.)	2A at 0.3VDC (TYP.) 2A at 0.6VDC (MAX.) 4A at 0.6VDC (TYP.) 4A at 1.2VDC (MAX.)	○	—
	Output response time	Off → On	0.5ms or less	0.5ms or less	○	When the output delay time is considered in the system design, the operation of the whole system should be reviewed.
		On → Off	1.5ms or less	1.0ms or less	△	
Communications	Cyclic transmission	RX/RY points	16 points	16 points	○	—
		RWr/RWw points	12 points	4 points (Default)	△	The number of points and assignment differ. When using them in the program, delete the relevant items or change the devices to be assigned.
External dimensions	Height (H)	235mm	238mm	△	The external dimensions differ. Check the location space. (Also, the position of the mounting holes differs.)
	Width (W)	60mm	63mm		
	Depth (D)	38.5mm	37.5mm		

*1   The total output current that flows through one connector should be 4A or less.

6.3   I/O combined module

NZ2GF12A42-16DT, NZ2GN12A42-16DT

○: Compatible, △: Some changes

Item		Model to be discontinued	Alternative model	Compatibility	Impact of the change
		NZ2GF12A42-16DT	NZ2GN12A42-16DT		
Input specifications	Rated input current	7mA TYP.	7.3mA TYP.	○	—
	Input resistance	3.3kΩ	3.0kΩ	○	—
	ON voltage/ON current	15VDC or higher/ 3.5mA or higher	11VDC or higher/4mA or higher	△	Check that the connected device satisfies the ON/OFF condition.
	OFF voltage/OFF current	8VDC or lower/1.7mA or lower	5VDC or lower/1.5mA or lower	△	
	Input response time	0/0.5/1/1.5/5/10/20/ 70ms	0/0.2/1/1.5/5/10/20/ 70ms	△	If the setting value of 0.5 is used for the present model, other setting should be set for the alternative model.
Output specifications	Maximum load current	2A/1 point 8A/1 common	4A/1 point (Y8 to YB)[*1] 2A/1 point (YC to YF) 12A/1 common	○	—
	Maximum voltage drop at ON	0.5A at 0.3VDC (TYP.) 0.5A at 0.6VDC (MAX.)	2A at 0.25VDC (TYP.) 2A at 0.5VDC (MAX.) 4A at 0.5VDC (TYP.) 4A at 1.0VDC (MAX.)	○	—
	Output response time	Off → On	0.5ms or less	0.5ms or less	○	When the output delay time is considered in the system design, the operation of the whole system should be reviewed.
		On → Off	1.5ms or less	0.8ms or less	△	
Communications	Cyclic transmission	RX/RY points	16 points	16 points	○	—
		RWr/RWw points	12 points	4 points (Default)	△	The number of points and assignment differ. When using them in the program, delete the relevant items or change the devices to be assigned.
External dimensions	Height (H)	235mm	238mm	△	The external dimensions differ. Check the location space. (Also, the position of the mounting holes differs.)
	Width (W)	60mm	63mm		
	Depth (D)	38.5mm	37.5mm		

*1   The total output current that flows through one connector should be 4A or less.

NZ2GF12A42-16DTE, NZ2GN12A42-16DTE

○: Compatible, △: Some changes

Item		Model to be discontinued	Alternative model	Compatibility	Impact of the change
		NZ2GF12A42-16DTE	NZ2GN12A42-16DTE		
Input specifications	Rated input current	7mA TYP.	7.3mA TYP.	○	—
	Input resistance	3.3kΩ	3.0kΩ	○	—
	ON voltage/ON current	15VDC or higher/3.5mA or higher	11VDC or higher/4mA or higher	△	Check that the connected device satisfies the ON/OFF condition.
	OFF voltage/OFF current	8VDC or lower/1.7mA or lower	5VDC or lower/1.5mA or lower	△	
	Input response time	0/0.5/1/1.5/5/10/20/70ms	0/0.2/1/1.5/5/10/20/70ms	△	If the setting value of 0.5 is used for the present model, other setting should be set for the alternative model.
Output specifications	Maximum load current	2A/1 point 8A/1 common	4A/1 point (Y8 to YB)[*1] 2A/1 point (YC to YF) 12A/1 common	○	—
	Maximum voltage drop at ON	0.5A at 0.5VDC (TYP.) 0.5A at 0.8VDC (MAX.)	2A at 0.3VDC (TYP.) 2A at 0.6VDC (MAX.) 4A at 0.6VDC (TYP.) 4A at 1.2VDC (MAX.)	○	—
	Output response time — Off → On	0.5ms or less	0.5ms or less	○	When the output delay time is considered in the system design, the operation of the whole system should be reviewed.
	Output response time — On → Off	1.5ms or less	1.0ms or less	△	
Communications	Cyclic transmission — RX/RY points	16 points	16 points	○	—
	Cyclic transmission — RWr/RWw points	12 points	4 points (Default)	△	The number of points and assignment differ. When using them in the program, delete the relevant items or change the devices to be assigned.
External dimensions	Height (H)	235mm	238mm	△	The external dimensions differ. Check the location space. (Also, the position of the mounting holes differs.)
	Width (W)	60mm	63mm		
	Depth (D)	38.5mm	37.5mm		

*1   The total output current that flows through one connector should be 4A or less.

6.4   Safety remote I/O module

NZ2GFS12A2-16DTE, NZ2GNS12A2-16DTE

○: Compatible, △: Some changes

Item			Model to be discontinued	Alternative model	Compatibility	Impact of the change
			NZ2GFS12A2-16DTE	NZ2GNS12A2-16DTE		
Standard	Functional safety standard		IEC61508 (SIL3) ISO13849-1 (Category 4, PLe)	IEC61508 (SIL3) ISO13849-1 (Category 4, PLe)	○	—
Input specifications	Rated input current		6mA TYP.	6.8mA TYP.	○	—
	Input resistance		4kΩ	3.2kΩ	○	—
	ON voltage/ON current		11VDC or higher/2mA or higher	11VDC or higher/4mA or higher	△	Check that the connected device satisfies the ON condition.
	OFF voltage/OFF current		5VDC or lower/1.5mA or lower	5VDC or lower/1.5mA or lower	○	—
	Input circuit response time	Off → On	0.5ms or less	0.4ms or less	△	When the delay time is considered in the system design, the operation of the whole system should be reviewed.
		On → Off	1.5ms or less	0.4ms or less	△	
	Safety remote station input response time		Input circuit response time + Input ON/OFF delay setting (0 to 1000ms, per 1ms)	Input circuit response time + Input response time (1/1.5/5/10/20/50/70ms)	△	Use an available setting value for the alternative model.
Output specifications	Maximum load current		1A/1 point	4A/1 point (Y0 to Y1)[*1] 2A/1 point (Y2 to Y3) 8A/1 common	○	—
	Maximum voltage drop at ON		1.0VDC or less	1.0VDC or less	○	—
	Output circuit response time	Off → On	10ms	0.4ms or less	△	When the output delay time is considered in the system design, the operation of the whole system should be reviewed.
		On → Off	10ms	0.4ms or less	△	
Communications	Cyclic transmission	RX/RY points	80 points	16 points	△	The number of points and assignment differ. When using them in the program, delete the relevant items or change the devices to be assigned.
		RWr/RWw points	16 points	20 points	△	
		SA\X/SA\Y points	SA\X: 28 points SA\Y: 4 points	SA\X: 32 points SA\Y: 32 points	△	
External dimensions	Height (H)		235mm	238mm	△	The external dimensions differ. Check the location space. (Also, the position of the mounting holes differs.)
	Width (W)		60mm	63mm		
	Depth (D)		48.5mm	49mm		

*1   The total output current that flows through one connector should be 4A or less.

NZ2GFS12A2-14DT, NZ2GNS12A2-14DT

○: Compatible, △: Some changes

Item			Model to be discontinued	Alternative model	Compatibility	Impact of the change
			NZ2GFS12A2-14DT	NZ2GNS12A2-14DT		
Standard	Functional safety standard		IEC61508 (SIL3) ISO13849-1 (Category 4, PLe)	IEC61508 (SIL3) ISO13849-1 (Category 3, PLe)	△	The alternative model has the different category and the same performance level. If the category 4 is required, change the output wiring to use the NZ2GNS12A2-16DTE.
Input specifications	Rated input current		6mA TYP.	6.8mA TYP.	○	—
	Input resistance		4kΩ	3.2kΩ	○	—
	ON voltage/ON current		11VDC or higher/2mA or higher	11VDC or higher/4mA or higher	△	Check that the connected device satisfies the ON condition.
	OFF voltage/OFF current		5VDC or lower/1.5mA or lower	5VDC or lower/1.5mA or lower	○	—
	Input circuit response time	Off → On	0.5ms or less	0.4ms or less	△	When the delay time is considered in the system design, the operation of the whole system should be reviewed.
		On → Off	1.5ms or less	0.4ms or less	△	
	Safety remote station input response time		Input circuit response time + Input ON/OFF delay setting (0 to 1000ms, per 1ms)	Input circuit response time + Input response time (1/1.5/5/10/20/50/70ms)	△	Use an available setting value for the alternative model.
Output specifications	Maximum load current		2A/1 point	4A/1 point (Y0+, Y0-) 2A/1 point (Y1+, Y1-) 6A/1 common	○	—
	Maximum voltage drop at ON		1.0VDC or less	1.0VDC or less	○	—
	Output circuit response time	Off → On	10ms	0.4ms or less	△	When the output delay time is considered in the system design, the operation of the whole system should be reviewed.
		On → Off	10ms	0.4ms or less	△	
Communications	Cyclic transmission	RX/RY points	80 points	16 points	△	The number of points and assignment differ. When using them in the program, delete the relevant items or change the devices to be assigned.
		RWr/RWw points	16 points	20 points	△	
		SA\X/SA\Y points	SA\X: 28 points SA\Y: 4 points	SA\X: 32 points SA\Y: 32 points	△	
External dimensions	Height (H)		235mm	238mm	△	The external dimensions differ. Check the location space. (Also, the position of the mounting holes differs.)
	Width (W)		60mm	63mm		
	Depth (D)		48.5mm	49mm		

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6.5　Common specifications

This section shows the common specifications.

○: Compatible, △: Some changes, ×: Not compatible

Item		Model to be discontinued	Alternative model	Compatibility	Impact of the change
		NZ2GF□12A□□-16□□	NZ2GN□12A□□-16□□		
External interface	Communication part	M12 waterprooof connector, X-cord	M12 waterprooof connector, X-cord	○	—
	Module power supply part	7/8" waterproof connector	M12 waterprooof connector, L-cord	×	The connector type differs, so the connector for the power supply cable should be changed.
	I/O part	M12 waterprooof connector, A-cord	M12 waterprooof connector, A-cord	△	The connector type is not changed, but the alternative model does not support the one-touch type. A cable with a screw-type connector should be used.

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REVISIONS

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