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- Specification

FX3G

Customized Control

The new FX3G has been designed to redefine and build upon the FX1N PLC incorporating the innovative FX3 series technology to provide optimum customer benefits for simple yet performance-critical applications.

STANDARD



Two high speed communication ports

RS-422
USB



2 user keywords for scaled PLC access

Advanced Security



Large program memory

FX1N 8,000 Steps
FX3G 32,000 Steps

High-speed counting and input interrupts

60kHz



Extensive user memory for free data handling

D 8,000 Points
R 24,000 Points

User friendly positioning

Max. 3-axes

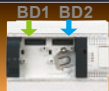


OPTION



Max. 2 basic expansion boards

Multiple expansion boards



Max. 4 serial communication channels

4-channel communication



Max. 4 special FX3U adapters

Multiple adapters



Max. 8 adapter analog channels

Easy analog processing



FX3G-14M[]



FX3G-24M[]



FX3G-40M[]



FX3G-60M[]



FX3G A 3rd generation compact PLC for general use

All in one CPU, power supply, and I/O. Includes many upgraded features compared to the FX1N, most notably the usage of the FX3 series ADP bus system and new expansion boards (BD).



Product list

FX3G		FX1N		FX3G		FX1N		FX3G		FX1N	
Main units				Expansion boards				Other optional equipment			
FX3G-14MT/ES		FX1N-14MT		FX3G-1DA-BD		FX1N-1DA-BD		FX3G-EEPROM-32L		FX1N-EEPROM-8L	
FX3G-24MT/ES		FX1N-24MT		FX3G-2AD-BD		FX1N-2DA-BD		FX3G-CNV-ADP		FX1N-CNV-BD	
FX3G-40MT/ES		FX1N-40MT		FX3G-8AV-BD		FX1N-8AV-BD		FX3G-5DM		FX1N-5DM	
FX3G-60MT/ES		FX1N-60MT		FX3G-232-BD		FX1N-232-BD		FX3U-32BL		FX1N-BAT	
FX3G-14MR/ES		FX1N-14MR-ES/UL		FX3G-422-BD		FX1N-422-BD					
FX3G-24MR/ES		FX1N-24MR-ES/UL		FX3G-485-BD		FX1N-485-BD					
FX3G-40MR/ES		FX1N-40MR-ES/UL									
FX3G-60MR/ES		FX1N-60MR-ES/UL									

Specifications

Devices		
Auxiliary relay	general type	M0~M7679
	special type	M8000~M8512
State relay		S0~S4095
Timer(ON delayed)		T0~T319
Counter		C0~C255
Data register (32 bit when used in pair form)	general type	D0~D7999
	special type	D8000~D8511
Extension register	general type	R0~R23999
	extension file register	ER0~ER23999
Pointer		P0~P2047
Nesting		N0~N7
Input interrupt		6 points, >=0.01ms
Timer Interrupt		3 points, 10 to 99ms
Constant	decimal	16bit: -32,768~+32,767 32bit: -2,147,483,648~+2,147,483,647
	hexadecimal	16bit: 0~FFFF 32bit: 0~FFFFFFFF

Programming	
I/O points	256 points (including CC-Link network I/Os)
Address range	Max.128 inputs X0~X177, Max. 128 outputs Y0~Y177
High-speed counter	1 Phase: 60kHz×4 + 10kHz×2 2 Phase:30kHz×2 + 5kHz×1
Program memory	16k step (standard mode) 32k step (extended mode)
"Instruction time (contact instruction)"	0.21μs (standard mode) 0.42μs (extended mode)
Number of instructions	27 sequence instructions, 2 step ladder instructions, 123 applied instructions
Programming language	Step ladder, instruction list, SFC
Program execution	Cyclical execution, refresh mode processing
Program protection	Keyword function (2 different keywords, maximum password length: 16 characters)

Power Supply	
Power supply	100~240 V AC
Power supply tolerance level	AC85~264V
Inrush current at ON	30 A / 5 ms (at 100 V AC); 50 A / 5 ms (at 200 V AC)
Allowable momentary power failure time	10 ms
24 V DC service power supply	400 mA

		Relay Models		Transistor Models	
Switching voltage(max.)	V	<240 V AC, <30 V DC		5 – 30 V DC	
Max. output current	- per output	A	2		0.5
	- per group*	A	8		0.8
Max. switching current	- inductive load		80 VA		12 W
Response time	ms	10		<0.2 (<5 μs for Y0-Y1)...14M,24M <0.2 (<5 μs for Y0-Y2)...40M,60M	
Life of contacts (switching times)**			3,000,000 at 20 VA; 1,000,000 at 35 VA; 200,000 at 80 VA		—

FX3 series control solutions

With superior built-in functionality and straightforward usability, the FX Series meets the needs of a variety of user applications.



* This limitation applies to the maximum output current for each reference terminal (Common), each serving 1 to 4 relay or transistor outputs. Please observe the reference terminal assignments for group identification.

** Not guaranteed by Mitsubishi Electric.

Safety Warning

To ensure proper use of the products listed in this catalog, please be sure to read the instruction manual prior to use.

MITSUBISHI ELECTRIC CORPORATION

HEAD OFFICE: TOKYO BUILDING, 2-7-3 MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN
HIMEJI WORKS: 840, CHIYODA CHO, HIMEJI, JAPAN