

General Specification

UL-approved and
CE Mark-compliant Modules

FA-M3

GS 34M6C11-21E

■ General

This table lists the modules for the FA-M3 range-free controller that are approved for the UL standard below and comply with the CE Mark codes below.

		Certification or Compliance No.
UL		UL508 approved (File No. E188707)
CE	EMC Requirements	EN 61326, EN55011 (Class A Group 1), EN61000-6-2 EN61000-3-2, EN61000-3-3 Compliance
	Low Voltage Directive	EN 61010-1 (Category II Installation and Pollution Degree 2) Compliance

Category	Name	Model Code	Specifications	UL approval	CE Mark Compliance	
Base	Base module*1	F3BU04-0N	Single-slot power supply module + 4 empty slots (for CPU and I/O modules)	○	○	
		F3BU05-0D	Single-slot power supply module + 5 empty slots (for CPU and I/O modules)	○	○	
		F3BU06-0N	Single-slot power supply module + 6 empty slots (for CPU and I/O modules)	○	○	
		F3BU09-0N	Double-slot power supply module + 9 empty slots (for CPU and I/O modules)	○	○	
		F3BU13-0N	Double-slot power supply module + 13 empty slots (for CPU and I/O modules)	○	○	
		F3BU16-0N	Double-slot power supply module + 13 empty slots (for CPU and I/O modules)	○	○	
Power supply	Power supply module	F3PU10-0N	Power supply voltage 100-240 V AC, Rated output 5 V DC/2.0A (4 or 6 slots only, M3.5 terminal screw)	○		
		F3PU10-0S	Power supply voltage 100-240 V AC, Rated output 5 V DC/2.0A (4 or 6 slots only, M4 terminal screw)	○	○	
		F3PU20-0N	Power supply voltage 100-240 V AC, Rated output 5 V DC/4.3A (9,13 or 16 slots only, M3.5 terminal screw)	○		
		F3PU20-0S	Power supply voltage 100-240 V AC, Rated output 5 V DC/4.3A (9,13 or 16 slots only, M4 terminal screw)	○	○	
		F3PU16-0N	Power supply voltage 24 V DC, Rated output 5 V DC/2.0A (4 or 6 slots only)	○		
		F3PU26-0N	Power supply voltage 24 V DC, Rated output 5 V DC/4.3A (9,13 or 16 slots only)	○		
		F3PU30-0N	Power supply voltage 100-240 V AC, Rated output 5 V DC/6.0A (9,13 or 16 slots only, M3.5 terminal screw)			
		F3PU30-0S	Power supply voltage 100-240 V AC, Rated output 5 V DC/6.0A (9,13 or 16 slots only, M4 terminal screw)	○	○	
		F3PU36-0N	Power supply voltage 24 V DC, Rated output 5 V DC/6.0A (9,13 or 16 slots only, M3.5 terminal screw)			
F3PU36-0S	Power supply voltage 24 V DC, Rated output 5 V DC/6.0A (9,13 or 16 slots only, M4 terminal screw)	○	○			
CPU	Sequence CPU module	F3SP21-0N	Ladder 10 K steps, 0.18 m s/basic instruction, with memory	○	○	
		F3SP25-2N	Ladder 20 K steps, 0.12 m s/basic instruction, with memory	○	○	
		F3SP35-5N	Ladder 100 K steps, 0.09 m s/basic instruction, with memory	○	○	
		F3SP28-3N	Ladder 30 K steps, 0.045 m s/basic instruction, with memory	○	○	
		F3SP28-3S	Ladder 30 K steps, 0.045 m s/basic instruction, with memory	○	○	
		F3SP38-6N	Ladder 120 K steps, 0.045 m s/basic instruction, with memory	○	○	
		F3SP38-6S	Ladder 120 K steps, 0.045 m s/basic instruction, with memory	○	○	
		F3SP53-4H	Ladder 56 K steps, 0.0175 m s/basic instruction, with memory	○	○	
		F3SP53-4S	Ladder 56 K steps, 0.0175 m s/basic instruction, with memory	○	○	
		F3SP58-6H	Ladder 120 K steps, 0.0175 m s/basic instruction, with memory	○	○	
		F3SP58-6S	Ladder 120 K steps, 0.045 m s/basic instruction, with memory	○	○	
		F3SP59-7S	Ladder 254 K steps, 0.0175 m s/basic instruction, with memory	○	○	
		F3SP66-4S	Ladder 56 K steps, 0.0175 m s/basic instruction, with network functions	○	○	
		F3SP67-6S	Ladder 120 K steps, 0.0175 m s/basic instruction, with network functions	○	○	
		F3FP36-3N	SFC + 40 K step, ladder 0.09 m s/contact and coil instruction	○	○	
	Basic CPU module	F3BP20-0N	120-Kbyte Basic program	○	○	
		F3BP30-0N	510-Kbyte Basic program	○	○	
	FA-M3 value	FA-M3 value (with power supply)	F3SC21-1N	Consists of F3SP05-0P, F3BU04-0N, F3WD64-3N	○	
			F3SC22-1F*1	Consists of F3SP08-0P, F3BU04-0N, F3WD32-3F	○	
FA-M3 value II (with power supply)		F3SC22-2F*1	Consists of F3SP08-0P, F3BU04-0N, F3WD64-3F			
		F3SC22-1A*1	Consists of F3SP08-0P, F3BU04-0N, F3XD16-3F, F3YD14-5A	○		
		F3SC23-1F*1	Consists of F3SP08-SP, F3BU04-0N, F3WD32-3F	○	○	
		F3SC23-2F*1	Consists of F3SP08-SP, F3BU04-0N, F3WD64-3F	○	○	
		F3SC23-1A*1	Consists of F3SP08-SP, F3BU04-0N, F3XD16-3F, F3YD14-5A	○	○	
		F3SC23-2P*1	Consists of F3SP08-SP, F3BU04-0N, F3WD64-3P	○	○	
Maintenance		F3SC23-6P*1	Consists of F3SP08-SP, F3BU04-0N, F3WD64-4P	○	○	
		F3SP05-0P	Power supply + sequence CPU module (Ladder 5K steps)	○		
		F3SP08-0P	Power supply + sequence CPU module (Ladder 10K steps, M3.5 terminal screw)	○		
Memory card module	Memory card module	F3SP08-SP	Power supply + sequence CPU module (Ladder 10K steps, M4 terminal screw)	○	○	
		F3WD32-3F	DC input sink/source, 24VDC, TR output sink type, 24VDC, 0.1A, 16 points each	○	○	
Input/output module	Input module	F3EM01-0N	Media : Compact flash, FAT16	○	○	
		F3XA08-1N	100-120 V AC input, 8 points, with terminal block	○		
		F3XA08-2N	200-240 V AC input, 8 points, with terminal block	○		
		F3XA16-1N	100-120 V AC input, 16 points, with terminal block			
		F3XH04-3N	24 V DC input, with pulse catch function, 4 points, with terminal block	○	○	
		F3XC08-0N	Voltage-free contact input, 8 points, with terminal block	○	○	
		F3XC08-0C	No-voltage contact input, 8 points Separate common, with terminal block	○	○	
		F3XD08-6N	12-24 V DC input, sink/source compatible, 8 points, with terminal block	○	○	
		F3XD08-6F	DC input sink/source, 12 to 24 V DC 8 points, with terminal block	○	○	
		F3XD16-3N	24 V DC input, sink/source compatible, 16 points, with terminal block	○	○	
		F3XD16-3F	DC input sink/source, 24 V DC 16 points, with terminal block	○	○	
		F3XD16-3H	DC input, plus common, 24 V DC 16 points (high-speed input)	○	○	

*1: FA-M3 value or FA-M3 value II is not registered with model code. It means that all modules consisting FA-M3 value or FA-M3 value II have UL approval or CE Mark compliance.

Category	Name	Model Code	Specifications	UL approval	CE Mark Compliance	
Input/output module	Input module	F3XD16-4N	12 V DC input, sink/source compatible, 16 points, with terminal block	○	○	
		F3XD16-4F	DC input, sink/source, 12 V DC, 16 points, with terminal block	○	○	
		F3XD32-3N	24 V DC input, sink/source compatible, 32 points, with connector ^{*2}	○	○	
		F3XD32-3F	DC input sink/source, 12 V DC, 32 points, with connector ^{*2}	○	○	
		F3XD32-4N	12 V DC input, sink/source compatible, 32 points, with connector ^{*2}	○	○	
		F3XD32-4F	DC input sink/source, 12 V DC, 32 points, with connector ^{*2}	○	○	
		F3XD32-5N	5 V DC TTL input, 32 points, with connector ^{*2}	○	○	
		F3XD32-5F	TTL input, 5 V DC, 32 points, with connector ^{*2}	○	○	
		F3XD64-3N	24 V DC input, sink/source compatible, 64 points, with connector ^{*2}	○	○	
		F3XD64-3F	DC input sink/source, 12 V DC, 64 points, with connector ^{*2}	○	○	
		F3XD64-4N	12 V DC input, sink/source compatible, 64 points, with connector ^{*2}	○	○	
		F3XD64-4F	DC input sink/source, 12 V DC, 64 points, with connector ^{*2}	○	○	
		F3XD64-6M	12 to 24 V DC input, sink/source compatible, 64 points (8 x 8), with connector ^{*2}	○	○	
	Output module	F3YA08-2N	Triac output, 100-240 V AC, 1 A, 8 points, with terminal block	○	○	
		F3YC08-0N	Relay output, 24 V DC or 100 to 240 V AC, 2 A, 8 points, with terminal block	○	○	
		F3YC08-0C	Relay output (24 V DC, 100to 240 V AC) 24, independent common 8 points, with terminal block	○	○	
		F3YC16-0N	Relay output, 24 V DC or 100 to 240 V AC, 2 A, 16 points, with terminal block	○	○	
		F3YD04-7N	Transistor output, 24 V DC, 2 A, 4 points with independent common terminals, with terminal block	○	○	
		F3YD08-6A	Transistor (sink) output, 12 to 24 V DC, 1 A, 8 points, with terminal block	○	○	
		F3YD08-6B	Transistor (source) output, 12 to 24 V DC, 1 A, 8 points, with terminal block	○	○	
		F3YD08-7A	Transistor (sink) output, 12 to 24 V DC, 2 A, 8 points, with terminal block	○	○	
		F3YD14-5A	Transistor (sink) output, 12 to 24 V DC, 0.5 A, 14 points, with terminal block	○	○	
		F3YD14-5B	Transistor (source) output, 12 to 24 V DC, 0.5 A, 14 points, with terminal block	○	○	
		F3YD32-1A	Transistor (sink) output, 12 to 24 V DC, 0.1 A, 32 points, with connector ^{*2}	○	○	
		F3YD32-1B	Transistor (source) output, 12 to 24 V DC, 0.1 A, 32 points, with connector ^{*2}	○	○	
		F3YD32-1H	Transistor (sink) output, 12 to 24 V DC, 0.1 A, 32 points (with short-circuit protector), with connector ^{*2}	○	○	
		F3YD32-1R	Transistor (source) output, 12 to 24 V DC, 0.1 A, 32 points (with short-circuit protector), with connector ^{*2}	○	○	
		F3YD32-1P	TR output sink type, 12 to 24 V DC, 0.1 A, 32 points (with short-circuit protector), with connector ^{*2}	○	○	
		F3YD32-1T	TTL output, 5 V DC, 16 mA, 32 points, with connector ^{*2}	○	○	
		F3YD64-1A	Transistor (sink) output, 24 V DC, 0.1 A, 64 points, with connector ^{*2}	○	○	
		F3YD64-1F	TR output sink type, 24 V DC, 0.1 A, 64 points, with connector ^{*2}	○	○	
		F3YD64-1M	Transistor (matrix-scan) output sink type, 12 - 24 V DC, 64 points (8 x 8), with connector ^{*2}	○	○	
		F3YD64-1P	TR output sink type, 12 to 24 V DC, 0.1 A, 64 points (with short-circuit protector), with connector ^{*2}	○	○	
		F3YD64-1R	TR output source type, 12 to 24 V DC, 0.1 A, 64 points (with short-circuit protector), with connector ^{*2}	○	○	
		Input/output module	F3WD64-3N	Inputs: 24V DC voltage input, 32 points; Outputs: Transistor (sink) output, 24 V DC, 32 points; with connector ^{*2}	○	○
			F3WD64-3F	Input, TR output sink type, 24V DC, 32 points each, with connector ^{*2}	○	○
	F3WD64-3P		Input, TR output sink type, 24V DC, 32 points each, with connector ^{*2}	○	○	
	F3WD64-4N		Inputs:12V DC voltage input,32 points; Outputs:Transistor (sink) output, 12 V DC, 32 points;with connector ^{*2}	○	○	
	F3WD64-4F		Input, TR output sink type, 12 V DC, 32 points each, with connector ^{*2}	○	○	
	F3WD64-4P		Input, TR output sink type, 12 V DC, 32 points each, with connector ^{*2}	○	○	
	Analog input/output or temperature control module	Analog input module	F3AD04-0N	0-5, 1-5, and 10 - 10 V DC input, 4 points, with terminal block	○	○
			F3AD04-0V	0 to 5 V DC, 1 to 5 V DC, 10 to 10 V DC input, 4 points, with terminal block	○	○
			F3AD04-0R	0 to 5 V DC, 1 to 5 V DC, 10 to 10 V DC input, 4 points, High-resolution 16 bit A/D, with terminal block	○	○
			F3AD08-1N	0-5, 1-5, and 10 - 10 V DC input, 8 points, with terminal block	○	○
			F3AD08-1V	0 to 5 V DC, 1 to 5 V DC, -10 to 10 V DC input, 8 points, with terminal block	○	○
			F3AD08-4V	0 to 20 mA, 4 to 20 mA input, 8 points, with terminal block	○	○
F3AD08-1R			0 to 5 V DC, 1 to 5 V DC, 10 to 10 V DC input, 8 points, High-resolution 16 bit A/D, with terminal block	○	○	
F3AD08-4R			0 to 20 mA, 4 to 20 mA input, 8 points; High-resolution 16 bit A/D	○	○	
F3AD08-5R			0 to 5 V DC, 0 to 10 V DC, 1 to 5 V DC, -10 to 10 V DC input, 8 points, High-resolution 16 bit A/D	○	○	
F3AD08-6R			0 to 5 V DC, 0 to 10 V DC, 1 to 5 V DC, -10 to 10 V DC, 0 to 20 mA, 4 to 20 mA input, 8 points, High-resolution 16 bit A/D	○	○	
Analog output module		F3DA02-0N	10 - 10 V DC and 4-20 mA DC output, 2 points, with terminal block	○	○	
		F3DA04-1N	10 - 10 V DC and 4-20 mA DC output, 4 points, with terminal block	○	○	
		F3DA08-5N	10 - 10 V DC output, 8 points, with terminal block	○	○	
Temperature control /monitoring module		F3CT04-0N	Thermocouple input, 4 loops, 0.5 s scan, PID on/off control, with terminal block	○	○	
		F3CT04-1N	Same as above (F3CT04-0N) except for additional 4-20 mA DC continuous PID control outputs, with terminal block	○	○	
		F3CR04-0N	Resistance temperature detector input, 4 loops, 0.5 s scan, PID on/off control, with terminal block	○	○	
		F3CR04-1N	Same as above (F3CR04-0N) except for additional 4-20 mA DC continuous PID control outputs,with terminal block	○	○	

Category	Name	Model Code	Specifications	UL approval	CE Mark Compliance
Analog input/output or temperature control module	Temperature control/PID module	F3CU04-0N	Universal Input (TC, RTD or DC), 4 loops, 100 ms/2CH, 200 ms/4CH, with terminal block	○	○
		F3CU04-1N	Universal Input (TC, RTD or DC), 4 loops, 100 ms/2CH, 200 ms/4CH, Continuous 4-20 mA output, with terminal block	○	○
		F3CU04-0S	Universal Input (TC, RTD or DC), 4 loops, 100 ms/2CH, 200 ms/4CH, with terminal block	○	○
		F3CU04-1S	Universal Input (TC, RTD or DC), 4 loops, 100 ms/2CH, 200 ms/4CH, Continuous 4-20 mA output, with terminal block	○	○
	Temperature monitoring module	F3CX04-0N	Universal Input (TC, RTD or DC), 4 channels, with terminal block	○	○
PID control module	F3CV04-1N	1-5 V DC input, 4 loops, 0.5 s scan, PID on/off control, with terminal block	○	○	
Communication module	Personal computer link module	F3LC11-1N	One RS-232-C port, with connector	○	○
		F3LC11-2N	One RS-422/RS-485 port, with terminal block	○	○
		F3LC11-1F	One RS-232-C port with modem I/F, with connector	○	○
		F3LC11-2F	One RS-422/RS-485 port, with terminal block	○	○
		F3LC12-1F	Two RS-232-C ports with modem I/F, with connectors	○	○
	UT link module	F3LC51-2N	One RS-422/RS-485 port for simple connection of UT series digital temperature controllers,with terminal block	○	○
	DeviceNet scanner module	F3LD01-0N	One DeviceNet port, max. 500 Kbps, master/scanner functions, with connector	○	○
	Ethernet interface module	F3LE01-0T	10 Mbps, 10BASE-T connector	○	○
		F3LE01-5T	10 Mbps, 10BASE5/10BASE-T connector	○	○
		F3LE11-0T	10/100 Mbps, 10BASE-T/10BASE-TX, Remote maintenance function via E-mail connector	○	○
		F3LE12-0T	10/100 Mbps, 10BASE-T/100BASE-TX, Messaging (UDP/IP)	○	○
	FL-net interface module	F3LX02-1N	254 Stations max. 2.5 km max. of transmission distance, 10 Mbps, 10 Base 5/10 BASE-T, FL-net (OPCN-2) Ver 2.00	○	○
	YHLS Master Module	F3LH01-1N	12 Mbps max., 1 YHLS Port with European-type Terminal	○	○
		F3LH02-1N	12 Mbps max., 2 YHLS Ports with European-type Terminal	○	○
	YHLS Slave Unit	TAHWD32-3P AM	16 DC inputs (positive common), 24 V DC, MIL 16 TR outputs (sink-type, with short-circuit protection), 24 V DC 0.1 A, MIL	○	○
		TAHWD32-3N BM	16 DC inputs (negative common), 24 V DC, MIL 16 TR outputs (source-type, with short-circuit protection), 24 V DC 0.1 A, MIL	○	○
		TAHXD16-3P EM	16 DC inputs (positive common), 24 V DC, MIL	○	○
		TAHXD16-3N EM	16 DC inputs (negative common), 24 V DC, MIL	○	○
		TAHYD16-3E AM	16 TR outputs (sink-type, with short-circuit protection), 24 V DC 0.1 A, MIL	○	○
	TAHYD16-3E BM	16 TR outputs (source-type, with short-circuit protection), 24 V DC 0.1 A, MIL	○	○	
	NX interface module	F3NX01-0N	10 Mbps, 10BASE5/10BASE-T, NeXUS protocol connector	○	○
	RS-232-C communications module	F3RS22-0N	Max. 19,200 bps, two RS-232-C ports (for F3BP20 and F3MP30), with connectors	○	○
RS-422 communications module	F3RS41-0N	Max. 19,200 bps, one RS-422/RS-485 port(for F3BP20 and F3MP30), with terminal block	○	○	
Ladder communications module	F3RZ81-0N	Max. 19,200 bps, one RS-232-C port, with connector	○	○	
	F3RZ81-0F	Max. 115 Kbps, one RS-232-C port, with connector	○	○	
	F3RZ82-0F	Max. 115 Kbps, two RS-232-C ports, with connector	○	○	
	F3RZ91-0F	Max. 115 Kbps, one RS-422/RS-485 port, with connector	○	○	
	F3RZ91-0N	Max. 19,200 bps, one RS-422/RS-485 port, with terminal block	○	○	
GP-IB communication module	F3GB01-0N	One GP-IB port, with connector	○	○	
FA link/Fiber-optic FA link/FA bus module	FA link H module	F3LP02-0N	Max. 32 stations, max. transmission distance of 1 km, transmission speed of 1.25 Mbps, with terminal block	○	○
	Fiber-optic FA link H module	F3LP12-0N	Max. 32 stations, max. total transmission distance of 10 km, max. station-to-station distance of 1 km, transmission speed of 1.25 Mbps, with connector	○	○
	Fiber-optic FA-bus module	F3LR01-0N	Max. 7 stations, max. total transmission distance of 200 m, transmission speed of 10 Mbps, with connector	○	○
	Fiber-optic FA-bus 2 module	F3LR02-0N	Max. 32 stations, max. total transmission distance of 1.4 km, transmission speed of 10 Mbps, with connector	○	○
	FA-bus 2 module	F3LR02-1W	Max. 7 stations, max. total transmission distance of 80 m, transmission speed of 10 Mbps, with terminal block	○	○
Counter /positioning module	High-speed counter module	F3XP01-0H	Inc/dec counter, phase difference, positive pulse count, addition/subtraction, and so on, 400 Kpps (in quadruple multiplication mode), 1 channel, 32 bits, with connector ²	○	○
		F3XP02-0H	Inc/dec counter, phase difference, positive pulse count, addition/subtraction, and so on, 400 Kpps (in quadruple multiplication mode), 2 channels, 32 bits, with connector ²	○	○
	Pulse input module	F3XS04-3N	Ring-up counter, 0-20 kHz, 24 V input, 4 channels, 16 bits, with terminal block	○	○
		F3XS04-4N	Ring-up counter, 0-20 kHz, 12 V input, 4 channels, 16 bits, with terminal block	○	○
	Positioning module (multi-channel pulse output)	F3YP04-0N	Positioning of 4 axes, max. 250 kpps, PTP, with connector ²	○	○
		F3YP08-0N	Positioning of 8 axes, max. 250 kpps, PTP, with connector ²	○	○
		F3YP14-0N	Positioning of 4 axes, 499.75kpps max. (for pulse motor) /3.998Mpps (for servo control), with connector ²	○	○
F3YP18-0N	Positioning of 8 axes, 499.75kpps max. (for pulse motor) /3.998Mpps (for servo control), with connector ²	○	○		

Category	Name	Model Code	Specifications	UL approval	CE Mark Compliance
Counter /positioning module	Positioning module (advanced model with positioning pulse output)	F3NC11-0N	Positioning of 1 axis, max. 250 kpps, PTP, linear interpolation, advanced interpolation, speed and target point change during action, with connector*2	○	○
		F3NC12-0N	Positioning of 2 axes, max. 250 kpps, PTP, linear interpolation, advanced interpolation, speed and target point change during action, with connector*2	○	○
	Positioning modules (with pulse output)	F3NC32-0N	2 axes, 5 Mpps max., PTP and CP (linear, circular, and herical interpolation), direct and pattern operation, 2 counters for input from encoder with connector*2	○	○
		F3NC34-0N	4 axes, 5 Mpps max., PTP and CP (linear, circular, and herical interpolation), direct and pattern operation, 4 counters for input from encoder with connector*2	○	○
	Positioning module (with speed control voltage output)	F3NC51-0N	Speed control voltage output for positioning of 1 axis, with connector*2	○	○
		F3NC52-0N	Speed control voltage output for positioning of 2 axes, with connector*2	○	○
	Positioning module (for Torque Control)	F3NC61-0N	1 axis, Speed reference voltage output type, Analog input, with connector*2	○	○
	Positioning module (with MECHATROLINK-II interface)	F3NC96-0N	15 axes, with MECHATROLINK-II interface	○	○

*1 Purchase the optional rail-mount kit

*2 Purchase the optional connector for external connection and the connector's cover.