

MELSEC FX1S PLC

Base Unit with 10 -14 I/Os

Specifications	FX1S-10 MR-DS	FX1S-10 MR-ES/UL	FX1S-10 MT-DSS	FX1S-14 MR-DS	FX1S-14 MR-ES/UL	FX1S-14 MT- DSS
Max. number inputs/outputs	10	10	10	14	14	14
Power supply	24 V DC	100-240 V AC	24 V DC	24 V DC	100-240 V AC	24 V DC
Integrated inputs	6	6	6	8	8	8
Integrated outputs	4	4	4	6	6	6
Output type	Relay	Relay	Transistor (source)	Relay	Relay	Transistor (source)
Power consumption W	6	19	6	6.5	19	6.5
Weight kg	0.22	0.3	0.22	0.22	0.3	0.22
Dimensions(WxHxD) mm	60x90x49	60x90x75	60x90x49	60x90x49	60x90x75	60x90x49

Base Unit with 20 -30 I/Os

Specifications	FX1S-20 MR-DS	FX1S-20 MR-ES/UL	FX1S-20 MT-DSS	FX1S-30 MR-DS	FX1S-30 MR-ES/UL	FX1S-30 MT-DSS
Max. number inputs/outputs	20	20	20	30	30	30
Power supply	24 V DC	100-240 V AC	24 V DC	24 V DC	100-240 V AC	24 V DC
Integrated inputs	12	12	12	16	16	16
Integrated outputs	8	8	8	14	14	14
Output type	Relay	Relay	Transistor (source)	Relay	Relay	Transistor (source)
Power consumption W	7	20	7	8	21	8
Weight kg	0.3	0.4	0.3	0.35	0.45	0.35
Dimensions(WxHxD) mm	75x90x49	75x90x75	75x90x49	100x90x49	100x90x75	100x90x49

AC POWER, 24V DC INPUT TYPE

Model	Total No of I/O	Inputs		Outputs	
		Num	Type	Num	Type
FX1S –10MR-ES/UL	10	6	Sink / Source selectable	4	Relay
FX1S –10MT-ESS/UL					Transistor (Source)
FX1S –14MR-ES/UL	14	8	Sink / Source selectable	6	Relay
FX1S –14MT-ESS/UL					Transistor (Source)
FX1S –20MR-ES/UL	20	12	Sink / Source selectable	8	Relay
FX1S –20MT-ESS/UL					Transistor (Source)
FX1S –30MR-ES/UL	30	16	Sink / Source selectable	14	Relay
FX1S –30MT-ESS/UL					Transistor (Source)

24V DC POWER, 24V DC INPUT TYPE

Model	Total No of I/O	Inputs		Outputs	
		Num	Type	Num	Type
FX1S –10MR-DS	10	6	Sink / Source selectable	4	Relay
FX1S –10MT-DSS					Transistor (Source)
FX1S –14MR-DS	14	8	Sink / Source selectable	6	Relay
FX1S –14MT-DSS					Transistor (Source)
FX1S –20MR-DS	20	12	Sink / Source selectable	8	Relay
FX1S –20MT-DSS					Transistor (Source)
FX1S –30MR-DS	30	16	Sink / Source selectable	14	Relay
FX1S –30MT-DSS					Transistor (Source)

EXPANSION UNITS

EXTENSION BOARD

Model	Total No of I/O	Inputs			Outputs	
		Num	Voltage	Type	Num	Type

FX1N –4EX-BD	4	4	24V DC	Sink / Source selectable	-	-
FX1N –2EYT-BD	2	-	-	-	2	Transistor Sink / Source

OTHER ACCESSORIES

MEMORY CASSETTE

FX1 N-EEPROM-8L

Memory cassette with program transfer function. This EEPROM memory of 8000 steps can upload and download programs to an FX1S / FX1N Series PLC and makes battery backup unnecessary. The FX1S Series PLC can use programs upto 2000 steps. This memory cassette is equipped with a write protect switch to safeguard programs and can be used to transfer programs to multiple PLCs.

BATTERY

F2-40BL

Battery for memory backup. This battery backs up the RAM memory and the optional RAM memory cassette. This battery is required also to backup the retentive relays, data registers, timers, counters, and the RTC data. Life for battery: Approx. 5 years or Approx 3 years when the RAM cassette is used. (Guarantee Life – 1 Year)

DISPLAY MODULE

FX1N-5DM

Can be directly installed on the FX1S/FX1N Series PLC. No wiring required. Equipped with an LED and backlight that is maintenance free. Front panel key operation for data transfer to the PLC. Can be used in conjunction with an expansion board.

Handheld Programming Tool

FX-10P-E/FX-20P-E

Program in instruction list Monitor data for Timers, Counters and Memory registers Perform failure diagnosis, test functions, or maintenance and debugging The liquid crystal screen is easy to read The panel is small and light making it easy to carry