

MELSEC FX1N PLC

BASE UNIT

- ▶▶ AC POWERED
- ▶▶ DC POWERED

EXPANSION UNIT

- ▶▶ AC POWERED
- ▶▶ DC POWERED
- ▶▶ INPUT AND OUTPUT EXTENSION BLOCKS
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BASE UNIT

AC POWER, 24V DC INPUT TYPE

| Model | Total No of I/O | Inputs | | Outputs | |
|-------------------|-----------------|--------|--------------------------|---------|----------------------|
| | | Number | Type | Number | Type |
| FX1N –14MR-ES/UL | 14 | 8 | Sink / Source selectable | 6 | Relay |
| FX1N –14MT-ESS/UL | | | | | Transistor (Source) |
| FX1N –24MR-ES/UL | 24 | 14 | Sink / Source selectable | 10 | Relay |
| FX1N –24MT-ESS/UL | | | | | Transistor (Source) |
| FX1N –40MR-ES/UL | 40 | 24 | Sink / Source selectable | 16 | Relay |
| FX1N –40MT-ESS/UL | | | | | Transistor (Source) |
| FX1N –60MR-ES/UL | 60 | 36 | Sink / Source selectable | 24 | Relay |
| FX1N –60MT-ESS/UL | | | | | Transistor (Source) |

24V, 12V DC POWER, 24V DC INPUT TYPE

| Model | Total No of I/O | Inputs | | Outputs | |
|----------------|-----------------|--------|--------------------------|---------|----------------------|
| | | Number | Type | Number | Type |
| FX1N –14MR-DS | 14 | 8 | Sink / Source selectable | 6 | Relay |
| FX1N –14MT-DSS | | | | | Transistor (Source) |
| FX1N –24MR-DS | 24 | 14 | Sink / Source selectable | 10 | Relay |
| FX1N –24MT-DSS | | | | | Transistor (Source) |
| FX1N –40MR-DS | 40 | 24 | Sink / Source selectable | 16 | Relay |
| FX1N –40MT-DSS | | | | | Transistor (Source) |
| FX1N –60MR-DS | 60 | 36 | Sink / Source selectable | 24 | Relay |
| FX1N –60MT-DSS | | | | | Transistor (Source) |

- The FX2N special function blocks and extension I/O units cannot be connected with the DC Power Models
- The FX0N –40ER-DS & FX0N –40ET-DSS units cannot be connected when using 12V DC Input Power.

EXPANSION UNIT

FX 1N PLC - Powered Extension Units

AC POWER TYPE

| Model | Total No of I/O | Inputs | | | Outputs | |
|-------------------|-----------------|--------|---------|--------------------------|---------|----------------------|
| | | Number | Voltage | Type | Number | Type |
| FX2N –32ER-ES/UL | 32 | 16 | 24VDC | Sink / Source selectable | 16 | Relay |
| FX2N –32ET-ESS/UL | | | | | | Transistor (Source) |
| FX0N –40ER-ES/UL | 40 | 24 | 24DC | Sink / Source selectable | 16 | Relay |
| FX2N –48ER-ES/UL | 48 | 24 | 24VDC | Sink / Source selectable | 24 | Relay |
| FX2N –48ET-ESS/UL | | | | | | Transistor (Source) |
| FX2N –48ER-UA1/UL | 48 | 24 | 110V AC | | 24 | Relay |

DC POWER TYPE

| Model | Total No of I/O | Inputs | | | Outputs | |
|----------------|-----------------|--------|---------|--------------------------|---------|----------------------|
| | | Number | Voltage | Type | Number | Type |
| FX0N –40ER-DS | 40 | 24 | 24VDC | Sink / Source selectable | 16 | Relay |
| FX0N –40ET-DSS | | | | | | Transistor (Source) |

* When FX1N is supplied with 12V DC power, FX0N-40ER-DS and FX0N-40ET-DSS cannot be connected to the FX1N series PLC.

INPUT AND OUTPUT EXTENSION BLOCKS

| Model | Total No of I/O | Inputs | | | Outputs | |
|------------------|-----------------|--------|---------|--------------------------|---------|-------|
| | | Number | Voltage | Type | Number | Type |
| FX0N –8ER-ES/UL | 8* | 4 | 24V DC | Sink / Source selectable | 4 | Relay |
| FX0N –8EX-ES/UL | 8 | 8 | | Sink / Source selectable | - | - |
| FX0N –8EX-UA1/UL | 8 | 8 | 110V AC | | - | - |
| FX0N –16EX-ES/UL | 16 | 16 | 24V DC | Sink / Source selectable | - | - |

| | | | | | | |
|--------------------|----|----|---|--------------------------|----|-----------------------|
| FX2N –16EX-ES/UL | 16 | 16 | | Sink / Source selectable | - | - |
| FX0N –8EYR-ES/UL | 8 | - | - | - | 8 | Relay |
| FX0N –8EYT-ESS/UL | | - | - | - | | Transistor (Source) |
| FX0N –16EYR-ES/UL | 16 | - | - | - | 16 | Relay |
| FX0N –16EYT-ESS/UL | | - | - | - | | Transistor (Source) |
| FX2N –16EYR-ES/UL | 16 | - | - | - | 16 | Relay |
| FX2N –16EYS | | - | - | - | | Triac SSR |
| FX2N –16EYT-ESS/UL | | - | - | - | | Transistor (Source) |

* Actual I/O 8 points Occupied I/O 16 Points

EXTENSION BOARD

| Model | Total No of I/O | Inputs | | | Outputs | |
|---------------|-----------------|--------|---------|--------------------------|---------|--------------------------|
| | | Number | Voltage | Type | Number | Type |
| FX1N –4EX-BD | 4 | 4 | 24V DC | Sink / Source selectable | - | - |
| FX1N –2EYT-BD | 2 | - | - | - | 2 | Transistor Sink / Source |

OTHER ACCESSORIES

MEMORY CASSETTE

FX1N-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

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

HANDHELD PROGRAMMING TOOL

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

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