FX3U-32MT 6AD 2AD PLC FX3U Compatible Programmable Logic Controller 16DI 16DO 6AI 2AO

The FX3U-32MT 6AD 2DA is a programmable logic controller designed for industrial automation systems requiring digital, analog, and high-speed control capabilities.

Product Overview

This PLC provides 16 digital input channels and 16 transistor output channels, offering flexible connectivity for industrial equipment and automation systems. It includes 6 analog input channels and 2 analog output channels for continuous signal monitoring and control.

With built-in RS485 communication supporting multiple protocols and an integrated real-time clock (RTC), the controller enables time-based and networked automation. It also supports HMI integration and FX3U instruction sets for control programming.

Key Features & Advantages

- 16 digital inputs and 16 transistor outputs for control systems
- 6 analog inputs: 3 × 0–10V and 3 × 0–20mA
- 2 analog outputs: 0–10V
- High-speed outputs Y0–Y7 support 100K pulse output
- Built-in RS485 communication supporting 4 protocols
- Integrated RTC with power-down maintenance support

Applications

Suitable for industrial environments and equipment requiring:

- Automation control systems
- Digital and analog signal processing
- High-speed pulse output applications
- RS485 communication networks
- HMI-integrated monitoring and control

Features:

Inputs and Outputs: The FX3U PLC provides 14 digital inputs and 10 transistor outputs, offering extensive connectivity options for your industrial control needs.

Analog Inputs: With 3 channels supporting a voltage range of 0-10V and 3 channels supporting a current range of 0-20mA, the PLC allows for precise analog signal monitoring.

Analog Outputs: The PLC includes 2 analog outputs with a range of 0-10V, enabling accurate control of analog devices.

Programming Capacity: The FX3U PLC offers a generous program capacity of 8,000 steps, providing flexibility for developing complex control logic.

Fast Download Speed: With a download speed of 38,400, programming the PLC is efficient, saving you time and ensuring quick updates to your control system.

Compatibility with Mitsubishi Software: The FX3U PLC seamlessly integrates with popular Mitsubishi software, including GX-Developer and GX-WORK2, making it easy for users familiar with Mitsubishi products to program and interact with the PLC.

HMI Connection: The PLC supports connection with a Human Machine Interface (HMI), allowing for convenient monitoring and control of your industrial processes.

High-Speed Performance: Powered by a 32-bit industrial-grade MCU, the FX3U PLC delivers exceptional speed and reliable operation, outperforming the Mitsubishi FX3U PLC.

Industrial Reliability: The PLC is designed to meet the demands of industrial environments, offering enhanced anti-interference capabilities and ensuring reliable performance in rugged conditions.

RS485 MODBUS RTU: The built-in RS485 MODBUS RTU interface enables communication with other devices using the widely adopted MODBUS protocol.

Real-Time Clock: The PLC features a real-time clock function, allowing for time-based scheduling and control applications.

Experience the efficiency and reliability of the FX3U PLC, as it simplifies your industrial automation tasks while delivering superior performance and seamless compatibility with Mitsubishi software.

Software: GX-Developer/GX Works2

Programming Cable : USB to Serial cable

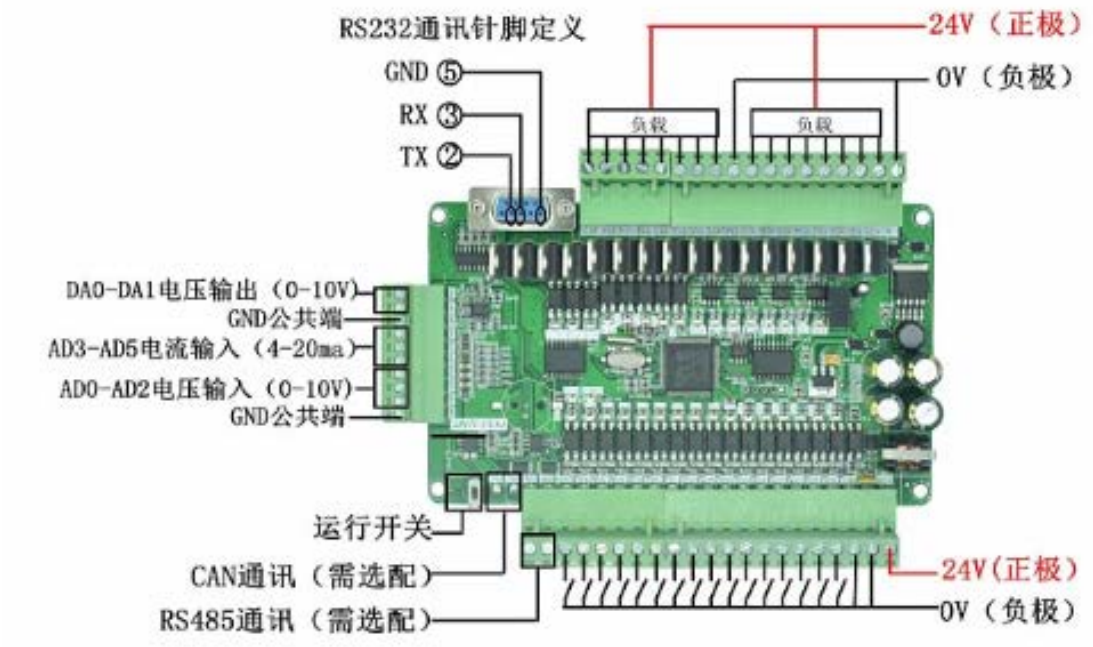
Specifications:

Input Power	DC24
Number of steps	8000 steps; 2 communication ports: 1 RS232 (DB9 serial port is communication port for the FX3u protocol 38400,7, E, 1 ; 1 RS485 (485 selection) communication protocol can be set D8120).

X input element	X0-X17 DC24 input, Low level, X0-5 is a high-speed count input port (the Default is 1K)
Y output element	Y0-Y17for optimal transistor output, 4 continuation electric apparatus 1 common end, altogether 3 common ends
Analog input	6 analog input, 12-bit precision, 3-channel analog input 0-10V, 3 channel analog input 0-20MA; read analog RD3A instruction
Analog output	2 analog output, 12-bit precision, output voltage: 0-10V. output analog voltage with WR3A instruction
Intermediate relay	M0-M3071, power-down save range can be set M0-M1023, the default M500-M1023
Step point	S0-1023, power-down save range can be set S0-S1023, the default S500-S9999
100Ms timer	T0-T199 Accumulated power-down saving T184-T199
10Ms timer	T200-T249 Accumulated power-down saving T246-T249
1Ms timer	T250-T383, where T250-255 is the cumulative type
16-bit counter	C0-C199, power-down save C100-C199
32-bit counter	C200-C219, save the power-down C220-C234
32-bit high-speed counter	C235-255; C235-C240 for the single-phase counter, not multiplier; C241-240 for the single-phase calculator, 2 octave; C2470249 for the dual-phase counter, not multiplier; C250-252 for dual-phase counter, ; C253-C255 for the dual-phase counter, 4 octave
Register D	D0-D7999, power-down save the range can be set D0-7999
Indirect addressing pointer V, Z	V0-7, Z0-7
P The subroutine jump number	P0-63
I interrupt	X0-5 external interrupt, timer interrupt (1MS unit) counter interrupt
Special M components	M8000 run-time normally closed, M8002 power pulse, M8011 is 10Ms pulse, M8012 is 100Ms pulse, M8013 is 1s pulse, M8014 is minute pulse

FX3U-32MT WIRING DIAGRAM

Note: the output can only be connected to DC direct load (within 3A), do not connect to AC or AC220V



Usb to Serial programming cable