

Schneider Series Service Manual

140CPU42402C

1. Description

The 140CPU42402C from Schneider Electric's Modicon Quantum series is a robust CPU module featuring a 486 controller setup. It supports both local and remote I/O systems and is equipped with dual Modbus Plus communication ports for versatile connectivity.

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Type CPU Module
Product	Line Modicon Quantum
Part	Number 140CPU42402C
Processor	486 Controller CPU
I/O	Compatibility Local & Remote I/O
Communication	Ports 2 x Modbus Plus (MB+)
Instruction	Set IEC 61131-3
Voltage	Supply 5 V DC
Built-in	Flash Memory Yes
Operating	Temperature 0...60°C
Memory	2 MB RAM
Execution	Time (Boolean) ~0.3 μs
Communication	Protocols Modbus, Modbus Plus
Coating	Conformal Coated (CC)
Watchdog	Timer Integrated
Mounting	Rack-mounted
Description	
The	Modicon Quantum series presents the 140CPU42402C, a CPU module that integrates advanced processing and communication capabilities. It utilizes a 486 controller CPU, demonstrating reliable compute performance required for various automation tasks. This model functions effectively with both local and remote I/O systems, providing flexibility in configurations.

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Technical specifications for 140CPU42402C

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Product Type CPU Module

Product Line Modicon Quantum

Part Number 140CPU42402C

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I/O Compatibility Local & Remote I/O

Communication Ports 2 x Modbus Plus (MB+)

Instruction Set IEC 61131-3

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Built-in Flash Memory Yes

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Description

The Modicon Quantum series presents the 140CPU42402C, a CPU module that integrates advanced processing and communication capabilities. It utilizes a 486 controller CPU, demonstrating reliable compute performance required for various automation tasks. This model functions effectively with both local and remote I/O systems, providing flexibility in configurations.

The device is designed to operate with a voltage supply of 5 V DC and features built-in flash memory for efficient data storage. Its architecture is supported by 2 MB of RAM, which is adequate for most control applications. The programming capabilities are enhanced by software compatibility with Unity Pro and Concept platforms, ensuring ease of use for engineers and developers.

With two Modbus Plus communication ports, the module facilitates robust networking options, adhering to protocols like Modbus and Modbus Plus for streamlined data transfer. The instruction set follows the IEC 61131-3 standard, which is widely recognized in industrial automation.

In terms of performance, this CPU module exhibits a Boolean execution time of approximately 0.3 microseconds, highlighting its efficiency in processing tasks. Additionally, it is coated with conformal coating (CC) for protection against dust and moisture, making it suitable for various environments. The integrated watchdog timer ensures continued operation and facilitates system reliability.

The design accommodates rack mounting, making installation straightforward in control cabinets. Operating within a temperature range of 0 to 60 degrees Celsius, the 140CPU42402C is a versatile solution for numerous control applications within the industrial automation sector.