

Schneider Series Service Manual

140CPU53414C

1. Description

The 140CPU53414C CPU module from Schneider Electric is a robust component designed for the Modicon Quantum series. It incorporates 586 KB of internal RAM and provides up to 4 MB of program memory, making it suitable for various automation applications.

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Type CPU Module
Product	Line Modicon Quantum
Part	Number 140CPU53414C
Memory	Type Internal RAM
RAM	586 KB
Communication	Ports Modbus RS232/Plus
Operating	Temperature Industrial Range
Power	Supply 5 V DC
Program	Memory 4 MB
Memory	Expansion Yes (PCMCIA slot)
Protective	Coating Yes (CC)
Max	Number of I/O Slots Up to 24
Communication	Memory 1 MB+ CC
Execution	Time (Boolean) ~0.2 μs
Processor	Type Quantum Processor
Instruction	Rate ~2 Kinst/ms

3. Product Information

The 140CPU53414C CPU module from Schneider Electric is a robust component designed for the Modicon Quantum series. It incorporates 586 KB of internal RAM and provides up to 4 MB of program memory, making it suitable for various automation applications.

Technical specifications for 140CPU53414C

Manufacturer Schneider Electric

Product Type CPU Module

Product Line Modicon Quantum

Part Number 140CPU53414C

Memory Type Internal RAM

RAM 586 KB

Communication Ports Modbus RS232/Plus

Operating Temperature Industrial Range

Power Supply 5 V DC

Program Memory 4 MB

Memory Expansion Yes (PCMCIA slot)

Protective Coating Yes (CC)

Max Number of I/O Slots Up to 24

Communication Memory 1 MB+ CC

Execution Time (Boolean) ~0.2 μs

Processor Type Quantum Processor

Instruction Rate ~2 Kinst/ms

Description

The Schneider Electric 140CPU53414C is a CPU module within the Modicon Quantum series, specifically crafted to meet the demands of industrial applications. This unit features an internal RAM of 586 KB, which is essential for executing complex tasks efficiently. For program storage, the module offers 4 MB of memory, providing ample space for automation programs.

Connectivity is facilitated through Modbus RS232/Plus communication ports, enabling effective data transfer within control systems. The design allows for up to 24 I/O slots, making this module a versatile choice for various configurations. The operating temperature is aligned with industrial standards, ensuring reliable performance in harsh environments.

Operating on a 5 V DC power supply, the 140CPU53414C is designed to maintain stability and functionality.

An additional benefit of this module is its memory expansion capability, facilitated through a PCMCIA slot, allowing users to scale their memory as needed. The module also features 1 MB+ of communication memory, streamlining data exchange and processing tasks. The protective coating (CC) adds another layer of durability to the unit. Its efficient Quantum processor boasts a Boolean execution time of around 0.2 microseconds and an instruction rate of approximately 2 Kinst/ms, making it suitable for high-speed operations in automation systems.