

Schneider  Series Service Manual

140NOC78100C

1. Description

The Schneider Electric 140NOC78100C is an Ethernet network module designed for the Modicon Quantum series. It supports both Ethernet/IP and Modbus TCP communication protocols, enabling flexible network configurations.

2. Specifications

| Specification | Value                                     |
|---------------|-------------------------------------------|
| Manufacturer  | Schneider Electric                        |
| Product       | Line Modicon Quantum                      |
| Part          | Number 140NOC78100C                       |
| EAN           | 3595864153278                             |
| Communication | Protocol Ethernet/IP and Modbus TCP       |
| Exchange      | Mode Full Duplex Mode                     |
| Maximum       | Connection Number 64                      |
| Transmission  | Rate 10 or 100 Mbit/s                     |
| Redundancy    | Option Hot Standby Redundant Architecture |
| Web           | Server Embedded                           |
| Redundant     | Ring Topology Supported                   |
| Operating     | Temperature Range 0°C to 60°C             |
| Storage       | Temperature Range -40°C to 85°C           |
| Daisy         | Chain Loop Topology Supported             |
| Mounting      | Type Rack Mountable                       |
| IP            | Rating IP20                               |
| Module        | Type Ethernet Network Module              |
| Coated        | Module Yes                                |
| Transmission  | Support Medium Twisted Pair               |

3. Product Information

The Schneider Electric 140NOC78100C is an Ethernet network module designed for the Modicon Quantum series. It supports both Ethernet/IP and Modbus TCP communication protocols, enabling flexible network configurations.

Technical specifications for 140NOC78100C

Manufacturer Schneider Electric

Product Line Modicon Quantum

Part Number 140NOC78100C

EAN 3595864153278

Communication Protocol Ethernet/IP and Modbus TCP

Exchange Mode Full Duplex Mode

Maximum Connection Number 64

Transmission Rate 10 or 100 Mbit/s

Redundancy Option Hot Standby Redundant Architecture

Web Server Embedded

Redundant Ring Topology Supported

Operating Temperature Range 0°C to 60°C

Storage Temperature Range -40°C to 85°C

Daisy Chain Loop Topology Supported

Mounting Type Rack Mountable

IP Rating IP20

Module Type Ethernet Network Module

Coated Module Yes

Transmission Support Medium Twisted Pair

Range of Product

Modicon Quantum automation platform

Product or Component Type

Ethernet control module

Complementary

Product Compatibility

140CPU6xxxx

Communication Port Protocol

EtherNet/IP

Modbus TCP

Exchange mode

Full duplex

Maximum number of connections

64

Transmission Rate

10/100 Mbit/s

Redundancy

Yes hot standby redundant architecture

Topology

Redundant ring

Daisy chain loop

Web server

Embedded

Communication Service

DHCP/BootP server

SMTP e-mail notification

Embedded router

CIP implicit messaging (I/O communication)

SNMP agent

Embedded 4-port switch

NTP time synchronization

CIP Explicit messaging (client messaging)

FDR server

Quality of Service (QoS)

Device Type Manager (DTM)

Ethernet service

Rapid Scanning Tree Protocol (RSTP)

Transmission support medium

Twisted pair

Port Ethernet

RJ45 10BASE-T/100BASE-TX

Marking

CE

Supply

Via the power supply of the rack

Local signalling

1 LED (green) for communication on the bus (Active)

1 LED (green) for configuration status (Ready)

1 LED (green/red) for module status (Mod Status)

1 LED (green/red) for network communication status (Net Status)

1 LED (green/red) for device network status (Net Status 1)

1 LED (green/red) for extended DIO network status (Net Status 2)

Module format

Standard

Net Weight

0.761 lb(US) (0.345 kg)

Description

The 140NOC78100C model from Schneider Electric is a specialized Ethernet network module tailored for the Modicon Quantum line. It facilitates communication through Ethernet/IP and Modbus TCP, providing essential networking capabilities. This module functions in full duplex mode, allowing for simultaneous two-way communication, which enhances data exchange efficiency.

It supports a maximum of 64 connections and operates at transmission rates of 10 or 100 Mbit/s, ensuring effective data transfer. For enhanced reliability, the module features a hot standby redundant architecture, allowing for a seamless switch-over if a failure occurs. The embedded web server provides easy access for monitoring and configuration.

The 140NOC78100C is designed to operate effectively in ambient temperatures from 0°C to 60°C, while it can withstand storage conditions ranging from -40°C to 85°C. This module supports both daisy chain and redundant ring topologies, providing flexible installation options.

As a rack-mountable unit with an IP20 protection rating, it is suitable for various industrial environments. The module is coated for added protection against environmental factors and utilizes twisted pair medium for transmission support, enhancing connectivity robustness.