

Schneider Series Service Manual

140NOM25200C

1. Description

The 140NOM25200C by Schneider Electric is a DIO head-end adapter designed for the Modicon Quantum series. It features dual interfaces: one for Modbus fiber and another for Modbus RS-232, enabling efficient communication capabilities.

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Type DIO head-end adaptor
Product	Line Modicon Quantum
Part	Number 140NOM25200C
EAN	3595861136984
Interfaces	1 Modbus fiber, 1 Modbus RS-232
Transmission	Rate 1 Mbps
I/O	Words 30 I/32 O
Power	Dissipation 4 W
Minimum	Pulse Width Distortion/Jitter 5 ns
Rise/Fall	Time 20 ns
Dynamic	Range 20 dB
Bus	Current Requirement 750 mA
Standards	UL 508
Ambient	Temperature 0 to 60 °C
Sensitivity	Scale > 30 dBm
Detected	Silence -36 dBm

3. Product Information

www.oilautotech.com

The 140NOM25200C by Schneider Electric is a DIO head-end adapter designed for the Modicon Quantum series. It features dual interfaces: one for Modbus fiber and another for Modbus RS-232, enabling efficient communication capabilities.

Technical specifications for 140NOM25200C

Manufacturer Schneider Electric

Product Type DIO head-end adaptor

Product Line Modicon Quantum

Part Number 140NOM25200C

EAN 3595861136984

Interfaces 1 Modbus fiber, 1 Modbus RS-232

Transmission Rate 1 Mbps

I/O Words 30 I/32 O

Power Dissipation 4 W

Minimum Pulse Width Distortion/Jitter 5 ns

Rise/Fall Time 20 ns

Dynamic Range 20 dB

Bus Current Requirement 750 mA

Standards UL 508

Ambient Temperature 0 to 60 °C

Sensitivity Scale > 30 dBm

Detected Silence -36 dBm

Description

The 140NOM25200C model serves as a digital input/output head-end adapter within Schneider Electric's Modicon Quantum series. This component is engineered with dual communication interfaces: a Modbus fiber interface and an RS-232 Modbus interface, both facilitating robust data transmission at an effective rate of 1 Mbps. The configuration supports 30 input words and 32 output words, providing substantial flexibility for I/O operations.

Power requirements for this adaptor are rated at a dissipation of 4 watts and a bus current draw of 750 mA, essential for performance stability. The device maintains a minimum pulse width distortion and jitter of just 5 nanoseconds, ensuring signal integrity during communication. Additionally, it features a rise and fall time of 20 nanoseconds, optimizing response times in dynamic applications.

In terms of performance metrics, the dynamic range of this head-end adapter is specified at 20 dB. It also operates effectively within an ambient temperature range of 0 °C to 60 °C, making it well-suited for industrial environments. This model adheres to UL 508 standards, demonstrating compliance with safety requirements. Its sensitivity scale exceeds 30 dBm, allowing for reliable performance in a range of operational settings. Furthermore, the detected silence threshold is set at -36 dBm, enhancing its capability in noise-sensitive applications.

Range of Product

Modicon Quantum automation platform

Product or Component Type

DIO head-end adaptor

Complementary

Number of port

1 Modbus Plus fiber optic single copper

1 Modbus RS232 twisted pair

Transmission Rate

1 Mbit/s

Electrical connection

1 connector RJ45

2 connectors TX/RX

I/O words

30 I/32 O

Checks

RAM

Checksum

Processor

RAM address

Power dissipation in W

4 W

Minimum pulse width distortion/jitter

5 ns

Wavelength

0.000032284 in (820 nm)

Power loss budget

11 dB 62.5/125 µm

www.oilautotech.com

16.5 dB 100/140 µm
6.5 dB 50/125 µm
Optical transmission
-16...-9 dBm 100/140 µm
-19.8...-12.8 dBm 50/125 µm
-3.5...110.5 dBm 62.5/125 µm
Rise/fall time
20 ns
Dynamic range
20 dB
Detected silence
-36 dBm
Sensitivity scale
> 30 dBm
Bus current requirement
750 mA
Environment
Resistance to electrostatic discharge
4 kV contact IEC 801-2
8 kV on air IEC 801-2
Resistance to electromagnetic fields
9.1 V/m (10 V/m) 80...2000 MHz IEC 801-3
Ambient Air Temperature for Operation
32...140 °F (0...60 °C)
Ambient Air Temperature for Storage
-40...185 °F (-40...85 °C)
Relative Humidity
95 % without condensation
Operating altitude
<= 16404.2 ft (5000 m)
Protective treatment
Conformal coating Humiseal 1A33
Standards
UL 508
Product Certifications
RINA
RMRS
DNV
GOST
GL
CSA Class 1 Division 2
C-tick
Ordering and shipping details
Category
US1PC2118150
Discount Schedule
PC21
GTIN
3595861136984
Returnability
No
Packing Units
Unit Type of Package 1
PCE
Nbr. of units in pkg.
1
Package 1 Height
2.0 in (5.0 cm)
Package 1 Width

www.oilautotech.com

6.5 in (16.5 cm)

Package 1 Length

12.4 in (31.5 cm)

Package weight(Lbs)

18.02 oz (511.0 g)

www.oilautotech.com