

Schneider Series Service Manual

140NOM21100C

1. Description

The 140NOM21100C is a DIO head-end adaptor belonging to the Schneider Electric Modicon Quantum series. This device enables communication via Modbus protocols over RS-485 and RS-232 interfaces, with a transmission speed of 1 Mbps. It features up to 30 input and 32 output words, supporting diverse applications for data exchange.

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Type DIO head-end adaptor
Product	Line Modicon Quantum
Part	Number 140NOM21100C
EAN	3595861135765
Interfaces	Modbus RS-485, Modbus RS-232
Transmission	Rate 1 Mbps
I/O	Words 30 I/32 O
Power	Dissipation 4 W
Bus	Current Requirement 780 mA
Format	Standard
Resistance	to Electrostatic Discharge 4 kV contact, 8 kV on air
Ambient	Temperature 0 to 60 °C
Humidity	95 % without condensation
Operating	Altitude <= 16404.2 ft (5000 m)
Protective	Treatment Conformal coating

3. Product Information

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Technical specifications for 140NOM21100C

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Transmission Rate 1 Mbps

I/O Words 30 I/32 O

Power Dissipation 4 W

Bus Current Requirement 780 mA

Format Standard

Resistance to Electrostatic Discharge 4 kV contact, 8 kV on air

Ambient Temperature 0 to 60 °C

Humidity 95 % without condensation

Operating Altitude <= 16404.2 ft (5000 m)

Protective Treatment Conformal coating

Description

The 140NOM21100C head-end adaptor from Schneider Electric's Modicon Quantum line is intended for integrating input and output functions into systems. This DIO module supports communication through Modbus RS-485 and RS-232, promoting effective and fast data transmission at a rate of 1 Mbps. With a capacity of 30 input and 32 output words, it facilitates efficient data handling within applications.

In terms of electrical specifications, it dissipates 4 W of power and requires a bus current of 780 mA for optimal operation. This adapter is built for functionality in various environments, operating effectively within a temperature range of 0 to 60 °C. It can endure high humidity conditions, rated at 95 % without any condensation, ensuring reliable performance over time.

The device's design allows it to function at altitudes of up to 16,404.2 feet (5000 meters), making it suitable for a range of installations. It incorporates robust electrostatic discharge resistance, rated at 4 kV contact and 8 kV in air, protecting against transient voltages. Finally, the conformal coating enhances its durability and suitability for use in challenging industrial conditions.

Range of product

Modicon Quantum automation platform

Product or component type

DIO head-end adaptor

Complementary

Product compatibility

140CRA21110

140CRA21120

Number of port

1 Modbus Plus RS485 twisted pair single copper

1 Modbus RS232 twisted pair single copper

Transmission rate

1 Mbit/s

I/O words

30 I/32 O

Checks

RAM address

RAM

Processor

Checksum

Power dissipation in W

4 W

Bus current requirement

780 mA

Module format

Standard

Environment

Resistance to electrostatic discharge

4 kV contact IEC 801-2

8 kV on air IEC 801-2

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Resistance to electromagnetic fields
9.1 V/yd (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
<= 5000 m
Protective treatment
Conformal coating Humiseal 1A33
Standards
UL 508
Product certifications
RMRS
FM Class 1 Division 2
CSA
GOST
C-Tick
Packing Units
Unit Type of Package 1
PCE
Number of Units in Package 1
1
Package 1 Height
1.890 in (4.800 cm)
Package 1 Width
6.496 in (16.500 cm)
Package 1 Length
12.402 in (31.500 cm)
Package 1 Weight
17.284 oz (490.000 g)
Unit Type of Package 2
S02
Number of Units in Package 2
2
Package 2 Height
5.906 in (15.000 cm)
Package 2 Width
11.811 in (30.000 cm)
Package 2 Length
15.748 in (40.000 cm)
Package 2 Weight
2.240 lb(US) (1.016 kg)

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