

Schneider  Series Service Manual

140CRA31908

1. Description

The 140CRA31908 from Schneider Electric is an Ethernet RIO Drop Adaptor designed for the Modicon Quantum series. It operates on a rated voltage of 5 VDC and 1.2 A current, with a maximum power rating of 6 W. This adaptor features three Ethernet ports and supports two communication protocols: EtherNet/IP and Modbus TCP.

2. Specifications

| Specification | Value                                    |
|---------------|------------------------------------------|
| Manufacturer  | Schneider Electric                       |
| Product       | Type Ethernet RIO Drop Adaptor           |
| Product       | Line Modicon Quantum                     |
| Part          | Number 140CRA31908                       |
| Rated         | Voltage 5 VDC                            |
| Rated         | Current 1.2 A                            |
| Rated         | Power 6 W                                |
| Number        | of Ethernet Ports 3                      |
| Protection    | Category IP20                            |
| Operating     | Altitude 2000 m                          |
| Number        | of Communication Protocols 2             |
| Communication | Protocol Type EtherNet/IP and Modbus TCP |
| Number        | of LEDs 4                                |
| Ambient       | Temperature Range 0 to 60 °C             |
| Operating     | Humidity 80% (non-condensing)            |

3. Product Information

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Technical specifications for 140CRA31908

Manufacturer Schneider Electric

Product Type Ethernet RIO Drop Adaptor

Product Line Modicon Quantum

Part Number 140CRA31908

Rated Voltage 5 VDC

Rated Current 1.2 A

Rated Power 6 W

Number of Ethernet Ports 3

Protection Category IP20

Operating Altitude 2000 m

Number of Communication Protocols 2

Communication Protocol Type EtherNet/IP and Modbus TCP

Number of LEDs 4

Ambient Temperature Range 0 to 60 °C

Operating Humidity 80% (non-condensing)

Description

The Schneider Electric 140CRA31908 serves as an Ethernet RIO Drop Adaptor within the Modicon Quantum series. Designed to provide digital connectivity, it requires a rated voltage of 5 VDC to operate and supports a current rating of 1.2 A. The device is capable of delivering up to 6 W of power.

Equipped with three Ethernet ports, this adaptor allows for efficient network setup. Additionally, it supports two communication protocols, namely EtherNet/IP and Modbus TCP, to facilitate varied connectivity options in automation tasks. The 140CRA31908 includes four LED indicators, enabling users to easily monitor operational statuses.

When installed, the adaptor can operate in temperatures ranging from 0 to 60 degrees Celsius. It is designed for an environment with a maximum humidity level of 80% without condensation. Protection is provided by an IP20 rating, making it suitable for typical industrial conditions. The module is also rated for use at altitudes up to 2000 meters, ensuring compatibility with systems located at higher elevations.

Range of Product

Modicon Quantum

Product or Component Type

Ethernet RIO drop adaptor

Number of port

3

Integrated connection type

Ethernet IP/Modbus TCP service port

Ethernet IP/Modbus TCP device network

Communication Port Protocol

Ethernet IP/Modbus TCP

Product destination

Modicon Quantum

Device Application

To provide the ability for a M580 system to control Modicon S908 coaxial bus

Communication Service

The input data are collected and published to the remote I/O head adaptor

Output modules are updated with the data received from remote I/O head adaptor

Complementary

Topology

Daisy chain loop

S908 bus

Local signalling

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

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

1 LED (green) for RUN

1 LED (red) for I/O

Product Compatibility

BMEP586040

BMEH584040

BMEP585040

BMEH586040

BMEP584040

Environmental characteristic

Standard environment

Hazardous location class I division 2 EN/IEC 61131-1

Width

6.6 in (167 mm)

Height

2.0 in (50 mm)

Net Weight

1.221 lb(US) (0.554 kg)

Environment

Product Certifications

UL 508

CE

C-tick

Standards

IEC 61000-4-16

CSA C22.2 No 142

IEC 55011

IP degree of protection

IP20 conforming to IEC 61131-2

IP20 conforming to IEC 60527

Overvoltage category

Class I conforming to IEC 61131-2

Ambient air temperature for operation

32...140 °F (0...60 °C) IEC 60068-2-2

32...140 °F (0...60 °C) IEC 60068-2-2

Ambient air temperature for storage

-40...185 °F (-40...85 °C) IEC 60068-2-2

-40...185 °F (-40...85 °C) IEC 60068-2-2

Vibration resistance

3.5 mm constant amplitude (f= 0.5...8.4 Hz) conforming to IEC 61131-2

1 gn constant acceleration (f= 8.4...150 Hz) conforming to IEC 61131-2

Operating altitude

6561.68 ft (2000 m)

Maximum altitude transport

9842.5 ft (3000 m)

Relative humidity

93 % conforming to IEC 60068

Ordering and shipping details

Category

US1PC3418160

Discount Schedule

PC34

GTIN

3606481207470

Returnability

No

Country of origin

FR

Packing Units

Unit Type of Package 1

PCE

Nbr. of units in pkg.

1

Package 1 Height

1.969 in (5.000 cm)

Package 1 Width

6.496 in (16.500 cm)

Package 1 Length

12.402 in (31.500 cm)

Package weight(Lbs)

20.882 oz (592.000 g)