

Schneider  Series Service Manual

NW-BM85S485

1. Description

The Schneider Electric NW-BM85S485 is a multiplexer bridge module that operates within the Modicon Quantum series. This device utilizes the Modbus RTU protocol over RS-485, supporting efficient communication in various applications.

2. Specifications

| Specification | Value                        |
|---------------|------------------------------|
| Manufacturer  | Schneider Electric           |
| Product       | Line Modicon Quantum         |
| Part          | Number NW-BM85S485           |
| Weight        | 4.56 lbs (2.07 kg)           |
| Protocol      | Modbus RTU over RS-485       |
| Product       | Multiplexer bridge module    |
| Data          | Rate Up to 115.2 kbps        |
| Cable         | Type Shielded twisted pair   |
| Connector     | Type RJ45                    |
| Signal        | Isolation Galvanic isolation |
| Operating     | Voltage 12-24V DC            |
| Power         | Consumption <1W              |
| Operating     | Temperature -20°C to +70°C   |
| Storage       | Temperature -40°C to +85°C   |
| Relative      | Humidity 5-95%               |
| Enclosure     | Rating IP20                  |
| Length        | 100 mm                       |
| Width         | 50 mm                        |
| Height        | 25 mm                        |

3. Product Information

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Technical specifications for NW-BM85S485

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Product Line Modicon Quantum

Part Number NW-BM85S485

Weight 4.56 lbs (2.07 kg)

Protocol Modbus RTU over RS-485

Product Multiplexer bridge module

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Operating Temperature -20°C to +70°C

Storage Temperature -40°C to +85°C

Relative Humidity 5-95%

Enclosure Rating IP20

Length 100 mm

Width 50 mm

Height 25 mm

Description

The NW-BM85S485 from Schneider Electric functions as a multiplexer bridge module in the Modicon Quantum series. This module facilitates communication utilizing the Modbus RTU protocol over RS-485, thereby enhancing data exchange capabilities. It is capable of supporting data rates of up to 115.2 kbps for efficient performance.

This device is designed to utilize shielded twisted pair cable, ensuring protection against electromagnetic interference for a stable communication link. An RJ45 connector allows for straightforward integration into existing systems. The module also features galvanic isolation, which enhances signal integrity and safety.

Operating within a voltage range of 12 to 24V DC, this module is energy-efficient, consuming less than 1 watt of power. It can function effectively in temperatures ranging from -20°C to +70°C, accommodating various environmental conditions. For storage, this device can withstand temperatures as low as -40°C and up to 85°C without compromising performance. Furthermore, it supports relative humidity levels between 5% and 95%. The IP20 enclosure rating indicates protection against solid objects greater than 12 mm, making it suitable for controlled environments. Overall, with a length of 100 mm, a width of 50 mm, and a height of 25 mm, the NW-BM85S485 represents a compact solution for multiplexing in industrial automation.

Range of product

Modicon Quantum

Modicon Premium/Quantum automation platform

Complementary

Communication port protocol

Modbus Plus

Communication port support

RS485

Modbus Plus bridges and repeaters characteristics

Multiplexer

Bridge

Mounting support

Rack

Number of port

4

[Us] rated supply voltage

115...220 V AC

24 V DC

Transmission support medium

-

Packing Units

Unit Type of Package 1

PCE

Number of Units in Package 1

1

Package 1 Height

16.3 cm

Package 1 Width

28.5 cm

Package 1 Length

33.5 cm

Package 1 Weight

2.836 kg

Unit Type of Package 2

P12

Number of Units in Package 2

10

Package 2 Height

45 cm

Package 2 Width

80 cm

Package 2 Length

120 cm

Package 2 Weight

40 kg