

Schneider Series Service Manual

140AVO02000C

1. Description

The 140AVO02000C is an analog output module from Schneider Electric's Modicon Quantum series, featuring four output channels with a 12-bit resolution. It supports current outputs ranging from -10 to 10 mA and ensures precise control with a linearity of ± 1 LSB.

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Type Analog output module
Product	Line Modicon Quantum
Part	Number 140AVO02000C
EAN	3595861136182
Channels	4
Addressing	Requirement 4 output words
Output	Resolution 12 bits
Output	Current -10...10 mA
Source	Resistance 0.1 Ohm
Max	Cable Distance 400 m
Linearity	1 LSB (+/-)
Update	Time 3 ms
Max	Power Dissipation 4.5 W
Isolation	Between Channels 500 V for 1 minute
Bus	Current Requirement 700 mA
Fuse	Rating 0.063 mA
Marking	CE

3. Product Information

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Technical specifications for 140AVO02000C

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- Description

Schneider Electric's 140AVO02000C is engineered as an analog output module within the Modicon Quantum series. It comprises four distinct channels, facilitating effective signal processing in various automation applications. Each channel can provide current outputs in the range of -10 to 10 mA, ensuring versatility in controlling different devices. The module achieves a resolution of 12 bits, which allows for fine granularity in analog signal representation. For addressing purposes, it requires four output words, which can be easily integrated into the system's architecture. This unit maintains a source resistance of 0.1 Ohm, contributing to the precision of the output. Maximum cable lengths can extend to 400 m, making it suitable for applications spread over larger distances. Additionally, it offers channel isolation of 500 V for a duration of one minute, ensuring protection against voltage surges and maintaining integrity across the outputs. With a reported linearity of 1 LSB (+/-), this module guarantees consistent performance.

The operational requirements include a bus current of 700 mA, and a maximum power dissipation of 4.5 W, which emphasizes its efficiency. Weighing in at 0.3 kg, it's manageable for mounting in various configurations. The update time for the module is recorded at 3 ms, promoting rapid response for dynamic applications. The unit also comes with a fuse rating of 0.063 mA, enhancing its precautionary measures for electrical safety. Compliance with CE marking further establishes its adherence to European safety standards.