

Schneider Series Service Manual

170AAO12000

1. Description

The Schneider Electric 170AAO12000 is designed to serve as an output module within the Modicon Momentum series. Offering four analog outputs, it can handle both current signals from 0 to 20 mA and voltage signals ranging from -10V to 10V, making it versatile for various applications.

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Line Modicon Momentum
Part	Number 170AAO12000
EAN	3595861147713
Product	Name Output Module
Output	Type Analog
Number	of Outputs 4
Signal	Type (current) 0 to 20 mA
Signal	Type (voltage) -10V/10V
Data	Format 16-bit
Output	Resolution 12 bits + sign for >= 1 Kohm (voltage signal), 12 bits + sign for <= 0.6 Kohm (current signal)
Max.	Load Capacitance 1 µF
Update	Time 2 ms
Max.	Power Dissipation 8.5 W
Power	Supply 24 VDC
Local	Signaling 4 LEDs for channel status
Current	Consumption 150 mA for 24 V DC actuator, 530 mA for 24 V DC base

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Technical specifications for 170AAO12000

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- Max. Load Capacitance 1 µF
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- Max. Power Dissipation 8.5 W
- Power Supply 24 VDC
- Local Signaling 4 LEDs for channel status
- Current Consumption 150 mA for 24 V DC actuator, 530 mA for 24 V DC base

The 170AAO12000 unit from Schneider Electric is an analog output module within the Modicon Momentum series. It is structured to deliver outputs in a variety of formats, supporting four distinct channels. Current output capabilities extend from 0 to 20 mA, while voltage outputs range from -10V to 10V. The data format adheres to 16 bits, providing substantial resolution. Specifically, the output resolution amounts to 12 bits with sign for voltage signals at or above 1 Kohm and matches those specifications for current signals below 0.6 Kohm. For load management, the module can handle a maximum load capacitance of 1 microfarad, which ensures stability in signal transmission. Its update time is efficient at 2 milliseconds, making it suitable for applications demanding prompt responses. The design includes indicators for status, employing four LEDs to provide local signaling for channel statuses.

The energy requirements specify a power supply setup of 24 VDC, with current consumption pegged at 150 mA for actuators and 530 mA for the base. Weighing 0.215 kilograms (0.474 pounds), this module offers a compact form, making it easy to integrate into existing systems while maintaining robust functionality.