Schneider □□□ Series Service Manual

170ADM35015

1. Description

The 170ADM35015 from Schneider Electric is designed as a discrete solid-state I/O module specifically for DC systems. With a configuration that includes 16 discrete input channels, it adheres to the IEC 1131-2 Type 1 standard. As an efficient solution, it offers 16 solid-state outputs while accommodating a range of input and output voltages.

2. Specifications

Specification	Value
Manufacturer	**Schneider Electric**
Product	**Type Discrete solid-state I/O module for DC applications**
Product	**Line Modicon Momentum**
Part	**Number 170ADM35015**
UPC	**785901396390**
Weight	**0.50 lbs (0.23 kg)**
Input	**Channels 16 discrete inputs, conforming to IEC 1131-2 Type 1**
Output	**Channels 16 discrete solid-state outputs**
Input	**Voltage Range 3 to 30 V DC**
Output	**Voltage Range Up to 30 V DC (24 V DC nominal)**
Input	**Logic Negative logic (sinking)**
Output	**Logic Negative logic (sourcing)**
Input	**Current (State 1) ≥ 2.5 mA**
Output	**Current per Point 0.5 A (4 A per group, 8 A total per module)**
Response	**Time (Input) 2.2 ms (0 to 1), 3.3 ms (1 to 0)**
Response	**Time (Output) < 0.1 ms (both 0 to 1 and 1 to 0 transitions)**
Isolation	**Voltage 500 V AC between channels and bus**
Power	**Dissipation ≤ 8 W**
Operating	**Temperature Range 0 to 60 °C**

3. Product Information

The 170ADM35015 from Schneider Electric is designed as a discrete solid-state I/O module specifically for DC systems. With a configuration that includes 16 discrete input channels, it adheres to the IEC 1131-2 Type 1 standard. As an efficient solution, it offers 16 solid-state outputs while accommodating a range of input and output voltages.

Technical specifications for 170ADM35015

Manufacturer Schneider Electric

Product Type Discrete solid-state I/O module for DC applications

Product Line Modicon Momentum

Part Number 170ADM35015

UPC 785901396390

Weight 0.50 lbs (0.23 kg)

Input Channels 16 discrete inputs, conforming to IEC 1131-2 Type 1

Output Channels 16 discrete solid-state outputs

Input Voltage Range 3 to 30 V DC

Output Voltage Range Up to 30 V DC (24 V DC nominal)

Input Logic Negative logic (sinking)

Output Logic Negative logic (sourcing)

Input Current (State 1) ≥ 2.5 mA

Output Current per Point 0.5 A (4 A per group, 8 A total per module)

Response Time (Input) 2.2 ms (0 to 1), 3.3 ms (1 to 0)

Response Time (Output) < 0.1 ms (both 0 to 1 and 1 to 0 transitions)

Isolation Voltage 500 V AC between channels and bus

Power Dissipation ≤ 8 W

Operating Temperature Range 0 to 60 °C

This product, the Schneider Electric 170ADM35015, functions as a discrete solid-state I/O module intended for DC applications. Featuring 16 input channels, it complies with IEC 1131-2 Type 1 standards, making it a reliable component in a wide variety of industrial operations. The device provides 16 solid-state outputs, which enhances its utility in control systems.

The input voltage spans from 3 to 30 V DC, ensuring versatility across different setups. For the output, it can handle voltages up to 30 V DC, nominally at 24 V DC. The I/O logic employed is negative: inputs are sinking while outputs are sourcing, enabling straightforward integration into existing controls.

Operationally, each input requires a current of at least 2.5 mA when in State 1. Each output point can manage a current of 0.5 A, contributing to a maximum of 4 A per group and 8 A across the module as a whole. It is crucial to observe these limits to prevent possible overheating, keeping in mind that the power dissipation is capped at 8 W.

In terms of responsiveness, the input features a switching time of 2.2 ms moving from 0 to 1 and 3.3 ms transitioning from 1 to 0. The output transition times are impressively fast, recording under 0.1 ms for both transitions. Additionally, robust electrical isolation is maintained with a specification of 500 V AC between output channels and the bus. With an operating temperature range from 0 to 60 °C, the 170ADM35015 module excels in adaptable environments and is suitable for numerous applications requiring reliable signaling.