

Schneider Series Service Manual

140AI33000C

1. Description

The Schneider Electric 140AI33000C is an input module from the Modicon Quantum series designed for precise measurements. Capable of handling a measurement current of 0.5 mA, it offers a high input impedance and excellent resolution.

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Type Input Module
Product	Line Modicon Quantum
Part	Number 140AI33000C
Measurement	Current 0.5 mA
Source	Resistance <200 Ohm
Input	Impedance > 10 mOhm
Linearity	0.00%
Resolution	0.76 µV
Power	Dissipation 2W
Protection	Type Internal Fuse
Bus	Current Requirement 400 mA
Resistance	to Electrostatic Discharge 4 kV
Max.	Operating Altitude 1000m above sea level

3. Product Information

The Schneider Electric 140AI33000C is an input module from the Modicon Quantum series designed for precise measurements. Capable of handling a measurement current of 0.5 mA, it offers a high input impedance and excellent resolution.

Technical specifications for 140AI33000C

Manufacturer Schneider Electric

Product Type Input Module

Product Line Modicon Quantum

Part Number 140AI33000C

Measurement Current 0.5 mA

Source Resistance <200 Ohm

Input Impedance > 10 mOhm

Linearity 0.00%

Resolution 0.76 µV

Power Dissipation 2W

Protection Type Internal Fuse

Bus Current Requirement 400 mA

Resistance to Electrostatic Discharge 4 kV

Max. Operating Altitude 1000m above sea level

Description

The 140AI33000C from Schneider Electric is a meticulously engineered input module within the Modicon Quantum series. This component registers a measurement current of 0.5 mA, signifying its capability for precise data acquisition. The module features a source resistance threshold of less than 200 Ohm, ensuring minimal resistance to the incoming signal. With an impressive input impedance greater than 10 mOhm, it guarantees high sensitivity to minute changes in input.

For accuracy, this module has a linearity specification of 0.00%, indicating precise output consistent with the input. Furthermore, it achieves a high resolution of 0.76 µV, essential for applications demanding detailed signal fidelity. It dissipates power at 2W, minimizing energy expenditure while functioning.

In terms of protection, the 140AI33000C includes an internal fuse that provides a defense mechanism against overload scenarios. The device has a bus current requirement of 400 mA, rendering it compatible with various setups. Weighing only 0.3 kg, this light module can be efficiently integrated into numerous configurations. The module also withstands electrostatic discharge events of up to 4 kV, augmenting its resilience in electrically noisy environments. It can function effectively at a maximum operational altitude of 1000 meters above sea level, making it suitable for a range of installations.