PRODUCT INFORMATION DASHBOARD

Schneider Electric 140ACI03000C

eight-channel multirange analogue input module

The module applies a 15 Hz single-pole low-pass filter, channel diagnostics and defined isolation to eight multirange analogue inputs.

PRODUCT ROLE

8 differential analogue inputs

SYSTEM

Accepts the configured 1–5 V or 4–20 mA signal at each differential channel.

INTERFACE

1–5 V and 4–20 mA ranges

SERVICE FOCUS

5 ms update time

Exact-model highlights

- 8 differential analogue inputs
- 1–5 V and 4–20 mA ranges
- 12-bit conversion
- 5 ms update time

Release questions

IDENTITY

Is the complete 140ACI03000C code confirmed?

INTERFACE

Do field signals and companion equipment match?

SETTINGS

Are installed parameters and mappings preserved?

ACCEPTANCE

Have normal, fault and recovery states been tested?

Technical data

Product range	Modicon Quantum automation platform
Product type	Analogue input module
Analogue inputs	8 differential channels
Input ranges	1–5 V; 4–20 mA
Resolution	12 bits
Addressing	9 input words
Input impedance	250 ohm current; greater than 20 megohm voltage
Absolute maximum input	50 V DC; 25 mA
Update time	5 ms
Channel-to-bus isolation	1000 V DC; 3000 V DC for 60 s
Channel-to-channel isolation	30 V DC
Filter	Single-pole low-pass, -3 dB at 15 Hz ±20%
Bus current	240 mA
Power dissipation	2 W
Operating temperature	0–60 °C

Application safeguards

SAFEGUARD 1

Record all eight channel assignments, ranges and loop-power arrangements before disconnection.

SAFEGUARD 2

Keep channel-to-channel working voltage within the documented 30 V DC boundary.

SAFEGUARD 3

Do not apply more than the specified 50 V DC or 25 mA absolute input limits.

SAFEGUARD 4

Separate and preserve current-loop and voltage-input terminal assignments.

Common applications

Process transmitter inputs

Reads documented 4–20 mA transmitter loops on eight channels.

Voltage signal acquisition

Measures 1–5 V field signals with differential inputs.

Quantum I/O renewal

Restores the same nine-word input mapping and channel assignments.

Loop diagnostics

Uses channel indication and broken-wire detection for configured current loops.

Interface checklist

- Field signal: Accepts the configured 1–5 V or 4–20 mA signal at each differential channel.
- Input conditioning: Applies the 15 Hz low-pass filter and 12-bit conversion.
- Quantum backplane: Transfers nine input words and module diagnostics to the controller.
- Control application: Uses scaled values and channel status within the approved program.

Installation snapshot

STEP 1

Match the replacement label to Schneider Electric 140ACI03000C and the approved hardware record.

STEP 2

Review the recorded wiring, interfaces, rack position and configuration before disturbing hardware.

STEP 3

Isolate hazardous energy and prove the required electrical condition at the work point.

STEP 4

Apply grounded ESD controls while handling the electronic assembly or backplane connection.

Model-specific FAQ

Q1 How many analogue inputs does Schneider Electric 140ACI03000C provide?

It provides eight differential analogue input channels.

Q2 Which signal ranges are supported by Schneider Electric 140ACI03000C?

The exact model supports 1–5 V and 4–20 mA input ranges.

Q3 How many input words does Schneider Electric 140ACI03000C use?

The Quantum address map requires nine input words.

Q4 What is the update time of Schneider Electric 140ACI03000C?

The published module update time is 5 ms.

Q5 What resolution does Schneider Electric 140ACI03000C provide?

The analogue conversion resolution is 12 bits.

Q6 What channel-to-channel limit applies to Schneider Electric 140ACI03000C?

The specified channel-to-channel isolation or working boundary is 30 V DC.

Q7 How should Schneider Electric 140ACI03000C current channels be tested?

Inject known 4–20 mA values, compare raw and scaled controller readings, and verify channel diagnostics.

Q8 What must be restored after replacing Schneider Electric 140ACI03000C?

Restore the exact range, terminal, shield, loop-power and nine-word controller mapping for every channel.

Product precautions

1. Record all eight channel assignments, ranges and loop-power arrangements before disconnection.
2. Keep channel-to-channel working voltage within the documented 30 V DC boundary.
3. Do not apply more than the specified 50 V DC or 25 mA absolute input limits.
4. Separate and preserve current-loop and voltage-input terminal assignments.
5. Restore shielding and commons without creating unintended ground paths.
6. Verify the nine input words map to the original controller addresses.
7. Test each channel with a traceable current or voltage source at more than one point.
8. Confirm module, external-fault and channel LEDs before process release.

Related products

Verified related products on ApterPower

Schneider Electric 140CRA21220

Quantum DIO drop interface

View Schneider Electric 140CRA21220

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Share the exact 140ACI03000C nameplate, application and required quantity for a model-specific quotation.