

140ACI05100SC

Controlled installation and commissioning guide

EXACT PRODUCT ROLE

32-channel selectable current-or-voltage analog input module for Quantum. This guide keeps the exact model as the controlling identity and does not substitute a neighboring part.

Pre-work identity record

Product type	Selectable current-or-voltage analog input module
Platform	Quantum Automation Series
Input count	32 single-ended analog inputs
Channel grouping	4 groups of 8
Current ranges	4 to 20 mA; 0 to 20 mA
Voltage ranges	+/-10 V DC; 0 to 10 V DC; 0 to 5 V DC; 1 to 5 V DC

RELEASE HOLD POINT

Do not begin removal until the installed marking, rack and slot, field-circuit references, software configuration and approved maintenance state have all been recorded.

SCOPE CONFIRMATION

Compare the installed label character by character with the work order. Record any suffix, coating, firmware, connector or memory detail that could change the approved hardware configuration.

BASELINE EVIDENCE

Capture the as-found LED pattern, controller diagnostic state and affected process values so that the final acceptance check has a traceable comparison point.

Plan the intervention

Translate the approved cabinet record into a controlled work package

Configuration and wiring preparation

- Configure each group of eight channels for its approved current or voltage range.
- Use shielded twisted-pair field cable and ground each shield at one end only as directed by the installation manual.
- Match the field terminal block, channel map and register allocation to the approved Quantum project.
- Record the Ready, Active, Fault and channel LED states before removal and after commissioning.

EVIDENCE BOUNDARY

Use the exact-model Spectrum Controls evidence and the approved site drawing together. Manufacturer evidence establishes product limits; the site record establishes terminal assignments, process meaning, protection and cabinet routing.

PRESERVE BEFORE REMOVAL

Photograph the full model label, connector orientation, slot location, cable and terminal labels, LED state and any removable memory, key or fuse arrangement that applies to this exact model.

CONFIGURATION EVIDENCE

Record the exact project revision, rack position, channel or network mapping, cable and terminal identities, and every installation-specific value that cannot be established from the product document alone.

WORK-PACKAGE COMPLETENESS

Include the exact Spectrum Controls evidence, current cabinet drawing, I/O or network schedule, isolation plan, acceptance sheet and a rollback path before the intervention is released.

Install under control

Mechanical, electrical and configuration checks

Ordered field checklist

- Record the complete 140ACI05100SC marking.
- Confirm the Quantum rack and exact slot position.
- Isolate field wiring and rack power before removal.
- Verify each group-of-eight input range and data format.
- Check every channel label and shield termination.
- Confirm the terminal block and connector arrangement.

MECHANICAL COMPLETION

Seat the module or accessory without forcing connectors. Restore every latch, screw, cable restraint and protective-earth arrangement specified by the rack and cabinet documentation.

ELECTRICAL COMPLETION

Compare every conductor and external supply with the approved point list before power is restored. Do not infer a terminal assignment from a similar model or from physical appearance.

CONFIGURATION COMPLETION

Confirm that the controller project resolves the exact hardware identity, address and channel mapping expected for the installed position.

As-found and as-left record

Installed identity	Full model, suffix, rack and slot
Connections	Cable, terminal, fuse and field-supply labels
Configuration	Project revision, channel mapping and diagnostics
Acceptance	Measured results, alarms cleared and final approver

Commission and accept

Prove identity, communication and every affected field function

Acceptance sequence

- Inspect the completed work with power removed and verify all labels against the work package.
- Restore power in the approved sequence and observe the first diagnostic state without forcing field outputs.
- Review Ready, Active, Fault and channel indications.
- Document all restored readings and diagnostics before release.
- Compare controller diagnostics, channel data and process feedback with the pre-work baseline.
- Record measured results, alarms, software revision, final rack state and the person accepting the work.

STOP CRITERIA

Stop commissioning if the exact model is not recognized, a channel disagrees with its point record, an unexpected diagnostic remains active, field power is outside the documented range or the approved redundancy state cannot be restored.

ACCEPTANCE RECORD

Retain the as-left drawing, configuration backup, point results, diagnostic screenshots and any changed fuse, cable or module identifiers with the maintenance record.

Final review prompts

Identity	Does every record show the complete exact model?
Energy	Are all supplies, grounds and protective devices restored?
Function	Did every affected channel, network or rack function pass?
Traceability	Are the as-left files and acceptance signatures complete?

Reference and support

Verified ApterPower product pages and direct contact

Verified related ApterPower product pages

Schneider Electric 140DAO84000

Schneider Electric 140DAI75300

RECOMMENDATION BOUNDARY

These links identify other verified ApterPower Modicon Quantum product pages for catalog navigation only. They do not establish compatibility, substitution or approval for the current installation.

Talk to Apter Power

WHATSAPP / PHONE +86 180 3023 5313

EMAIL sales13@apterpower.com

WEBSITE www.apterpower.com



DOCUMENT BOUNDARY

This field guide supports controlled planning and acceptance; it does not replace the official Spectrum Controls instructions, the approved system design or site-specific safe-work requirements.