

FIELD WORKFLOW

Schneider Electric 140DSI35300

Discrete Input Module

Schneider Electric 140DSI35300 is a Modicon Quantum 24 V DC supervised discrete input module with 32 positive-logic inputs arranged as four groups of eight. Its supervision circuit is designed to identify a broken field connection through dedicated status registers when the monitored current falls below the documented threshold.

Release-gate sequence



Before work starts

- Capture the rack, slot and controller I/O mapping.
- Record the exact 140DSI35300 nameplate code.
- Identify all four input groups and their commons.
- Confirm the field supply is 24 V DC.
- Check which field devices use supervision resistors.
- Record controller references to Broken Wire registers 3 and 4.

Field record essentials

MODEL ID

Record 140DSI35300 exactly.

SYSTEM

Modicon Quantum

SETTINGS

Preserve the verified installed configuration.

TEST BASIS

Define static and functional acceptance evidence.

Pre-installation verification

CHECK 01

Capture the rack, slot and controller I/O mapping.

CHECK 02

Record the exact 140DSI35300 nameplate code.

CHECK 03

Identify all four input groups and their commons.

CHECK 04

Confirm the field supply is 24 V DC.

CHECK 05

Check which field devices use supervision resistors.

CHECK 06

Record controller references to Broken Wire registers 3 and 4.

CHECK 07

Save the current online configuration and diagnostics.

CHECK 08

Prepare a controlled channel-by-channel test plan.

Interface inventory

- Thirty-two field input circuits are divided into four groups of eight.
- Each supervised point uses a shunt-resistor path across the field switch.
- A small open-switch current confirms field wiring continuity.
- Input states map into two input words for controller logic.
- Broken-wire information is mapped separately in registers 3 and 4.
- The rack backplane supplies the module-system interface.
- Group commons and field supply polarity must follow the positive-logic wiring diagram.
- The module belongs to the Modicon Quantum I/O architecture.

Hold point

Do not continue if the complete model, field-circuit identity, stored settings, protective functions or safe isolation state cannot be verified. Preserve existing wiring records and escalate the exact unresolved item.

Installation sequence

1

Place the process in a safe state and isolate rack and field power.

2

Label the terminal assembly and every grouped conductor.

3

Remove the existing module without disturbing unrelated rack positions.

4

Seat 140DSI35300 in the recorded slot and secure it.

5

Reconnect group commons and input conductors with correct polarity.

6

Verify each shunt resistor and continuity path.

7

Restore power and confirm module status without forcing process outputs.

8

Exercise ON, OFF and wire-break cases and record the controller response.

Commissioning and acceptance

GATE 1

Exact model and slot confirmed

GATE 2

Twenty-four-volt field supply verified

GATE 3

Four group commons checked

GATE 4

Thirty-two channel labels reconciled

GATE 5

Supervision resistors inspected

GATE 6

Normal input words validated

GATE 7

Broken Wire registers 3 and 4 tested

GATE 8

Forces cleared and acceptance logged

Fault-response checks

- An input that never changes requires field-voltage, switch and terminal checks before module replacement.
- A broken-wire indication with a normal open switch points to the supervision resistor or field conductor.
- Multiple faults in one group warrant checking the group common and field supply.
- Unexpected controller bits require verification of the two input-word mapping.
- Use registers 3 and 4 to separate wire supervision from process state.
- Do not bypass supervision permanently to clear a diagnostic.

Acceptance boundary

Release only after the normal state, commanded state, principal fault state and recovery behavior have all been observed at the field device, module and control-system indication.

Reference and handover

SOURCE 1

Schneider Electric Modicon Quantum Automation Platform catalog, discrete I/O selection guide, page 3/14.

SOURCE 2

Schneider Electric FAQ FA197897, supervised input operation and Broken Wire register behavior.

Related products

Verified related products on ApterPower

Schneider Electric 140NOE77110

Modicon Quantum Ethernet module

[View Schneider Electric 140NOE77110](#)

Schneider Electric 140DDO36400

Modicon Quantum discrete output module

[View Schneider Electric 140DDO36400](#)

Schneider Electric 140DDO35301

Modicon Quantum discrete output module

[View Schneider Electric 140DDO35301](#)

CONFIGURATION

Final settings and mappings archived

WIRING

Terminal and conductor labels reconciled

TEST RECORD

Measured results and fault tests retained

OPERATIONS

Normal indication and response briefed

Contact Apter Power

PHONE +86 180 3023 5313

EMAIL sales13@apterpower.com

WEBSITE www.apterpower.com



Share the exact 140DSI35300 nameplate, application and required quantity for a model-specific quotation.