Yokogawa ADV159-P00

Engineering Installation, Diagnostic and Acceptance Guide

Yokogawa ADV159-P00 is a 32-point individually isolated digital input module. Its exact marking, installed interfaces and companion equipment must be verified before replacement or commissioning.

01 Work package

Complete model	ADV159-P00
Product type	32-point individually isolated digital input module
Manufacturer	Yokogawa
Supply condition	New, original product
Technical source	Yokogawa CENTUM VP system bulletin and technical-document index

Field decisions

1 Establish identity

Capture the full marking, installed companion components and baseline before disconnection.

2 Inspect interfaces

Verify mounting, cable, connector, armor, approval and environmental boundaries.

3 Fit the exact chain

Preserve the documented probe-cable-Proximitor or sensor-monitor relationship.

4 Prove response

Use the approved stopped-machine and operating acceptance procedure.

5 Record as left

Save markings, configuration, test values and operating observations.

02 Interface and configuration map

Module function	Digital input module
Input count	32 points
Channel isolation	Each point individually isolated
Compatibility role	ST3/PB5-compatible input replacement
Basic specification code	P00
Replacement architecture	CENTUM VP field I/O / RIO system-upgrade context
Configuration boundary	Channel electrical type and terminal arrangement follow the approved Yokogawa project documents

Database boundary	Every input assignment and inversion/alarm use remains project-specific
Acceptance boundary	Prove each used point from field contact through the controller database

03 Installation workflow

Save all 32 assignments

Record terminal, tag, normal state and controller address before moving hardware.

Check field voltage type

Use the approved project drawing; do not infer voltage from the module family name.

Verify inactive states

Measure inactive channels for leakage, induced voltage or unintended shared returns.

Preserve isolation

Do not bridge isolated points with unauthorized test leads or commons.

Operate every used input

Compare field contact, terminal state, module indication and controller variable.

Record software effects

Document inversion, debounce, alarm and interlock logic associated with each input.

Application checks

ST3/PB5 input migration

Retain 32 legacy digital-input points in an approved CENTUM VP upgrade.

Discrete alarm acquisition

Bring individually isolated field states into the configured controller database.

Interlock input maintenance

Preserve point identity and prove the complete contact-to-logic path.

Fault isolation

Separate field contact, cable, terminal, module and database-assignment faults.

04 Diagnostic decision table

How should all 32 channels of ADV159-P00 be documented before replacement?	Create a point schedule containing field tag, terminal, normal state, controller address, alarm/interlock use and any software inversion.
What test proves individual isolation on ADV159-P00 has not been defeated by field wiring?	With the approved isolation method, inspect return paths and measure unintended coupling between points; compare results with the project wiring design.
How can a false input on ADV159-P00 be separated from a database error?	Measure the physical input state, check module indication, inspect raw controller value and then review scaling or inversion in the database.
What migration evidence is required for ADV159-P00?	Retain the source ST3/PB5 point list, new terminal/cable mapping, controller database cross-reference and point-by-point acceptance results.

Release review

Installation relationship	Use the exact model marking and manufacturer wiring or installation information for the delivered hardware.
System boundary	Verify host equipment, companion interfaces, field wiring and configuration before energizing.

Technical reference	Yokogawa CENTUM VP system bulletin and technical-document index.

Engineering questions

How should all 32 channels of ADV159-P00 be documented before replacement?	Create a point schedule containing field tag, terminal, normal state, controller address, alarm/interlock use and any software inversion.
What test proves individual isolation on ADV159-P00 has not been defeated by field wiring?	With the approved isolation method, inspect return paths and measure unintended coupling between points; compare results with the project wiring design.
How can a false input on ADV159-P00 be separated from a database error?	Measure the physical input state, check module indication, inspect raw controller value and then review scaling or inversion in the database.
What migration evidence is required for ADV159-P00?	Retain the source ST3/PB5 point list, new terminal/cable mapping, controller database cross-reference and point-by-point acceptance results.
How should unused channels on ADV159-P00 be handled?	Leave them in the manufacturer-approved unconnected state, label them as spare and verify that no unintended field voltage or database alarm is active.
What should be checked when one group of ADV159-P00 inputs is unstable?	Inspect the shared field supply, cable route, shielding, terminal condition and environmental noise before replacing the module.
How should an interlock input on ADV159-P00 be acceptance-tested?	Use the approved plant test to operate the source contact and prove the raw state, logic action, alarm indication and safe restoration.
What belongs in the as-left record for ADV159-P00?	Store the final 32-point map, terminal photographs, measured inactive and active states, controller results and any database changes.

Acceptance and support

Retain the full marking, installed-chain identities, test readings and approved machine configuration. Confirm the exact offered item and included scope in the written quotation.

Discuss the exact marking and installed application with Apter Power.
sales13@apterpower.com | +86 18030235313

Verified related product references

Related product	AAI841-H00
Related product	ADV159-P00
Related product	SDV144-S33
Related product	CP461-10

Commissioning record template

Installed asset	Machine, bearing, channel or cabinet reference
Companion identities	Probe, cable, sensor, interface or monitor markings
Mechanical datum	Mounting reference, reach, alignment or sealing condition
Electrical datum	Chain length, connector, shield, supply or input assignment
Before-work baseline	Gap, bias, vibration, continuity or channel observation
As-left result	Final measured value and functional proof
Approval basis	Applicable drawing, control requirement or site procedure
Handover	Technician, date, revision and maintenance-record location

Handover note

A replacement is complete only after the installed identity, physical interfaces, measured response and configuration record agree. Escalate any mismatch before the channel returns to protection or monitoring service.

Release checklist

Identity accepted	Complete marking agrees with the order, photographs and installed asset record.
Interfaces accepted	Mechanical fit, connector, wiring and companion components match the approved design.
Environment accepted	Temperature, contamination, vibration and route protection remain inside documented limits.

Verification evidence

Nameplate evidence Full marking, suffix and revision photographs	Related reference SDV144-S33
Interface evidence Connector, mounting and companion-hardware record	Related reference CP461-10