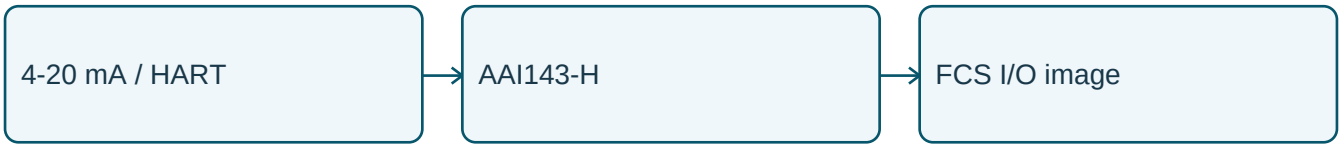
AAI143-H00 S1

01 / System identity and preparation

Yokogawa AAI143-H00 S1 brings transmitter loop signals and supported HART variables into the FCS input/output image for use by the control application.



Preparation priorities

Complete identity	Match AAI143-H00 S1 and its style marking, terminal assembly and existing channel allocation.
Loop relationship	Verify 4-20 mA signal type, two-wire/four-wire pin settings, polarity, transmitter supply and isolation-barrier arrangement.

Guide boundary

This Apter Power guide organizes preparation and acceptance checks. Apply the manufacturer instructions and approved site procedure for detailed wiring, mounting, configuration and functional testing.

Application boundary

The technical data describes the AAI143 base design. Match the complete AAI143-H00 S1 marking, style and installed configuration; do not transfer later suffix approvals or ratings automatically.

Product and installation enquiries

sales13@apterpower.com | +86 18030235313

Apply manufacturer instructions and approved site procedures.

02 / Configuration review before service

Complete identity	Match AAI143-H00 S1 and its style marking, terminal assembly and existing channel allocation.
Loop relationship	Verify 4-20 mA signal type, two-wire/four-wire pin settings, polarity, transmitter supply and isolation-barrier arrangement.
Data configuration	Record engineering scaling, channel assignment and the HART variables used by the application.
Functional acceptance	Apply controlled loop signals and compare analog values and HART variables with the expected application data.

Set the transmitter arrangement

Confirm the per-channel two-wire or four-wire setting before connection. Do not assume the old and replacement module settings match.

Check loop power

Include field-wire voltage drop when evaluating transmitter supply. Preserve polarity and the correct source of loop power.

Mismatch decision

Resolve a different catalog marking, interface, software requirement or installed configuration before proceeding. Physical similarity alone does not establish an approved replacement.

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03 / Hardware and interface checks

Use the correct barrier

Do not connect a Zener barrier to the AAI143 design. Review an isolation barrier and the full intrinsic-safety configuration where applicable.

Separate analog and HART timing

The analog update period and HART-variable refresh serve different functions. Verify each against the control application.

Key hardware references

Base input channels	16
Base input signal	4 to 20 mA
Base allowable input current	24 mA
Base analog accuracy	±16 µA

Preserve the connection record

Photograph and label the affected connections before disconnection. Retain the original routing, module positions and identification with the work order, and compare the restored installation against that record.

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04 / Commissioning and diagnostic decisions

Review redundancy pairing

Use the approved matching modules and adjacent-slot arrangement when the system is configured for redundant HART analog I/O.

Validate scaling and variables

Check low, mid and high test points, channel scaling and the assigned HART variables before releasing the loop to service.

Acceptance checkpoints

Before energization	Verify 4-20 mA signal type, two-wire/four-wire pin settings, polarity, transmitter supply and isolation-barrier arrangement.
Configuration review	Record engineering scaling, channel assignment and the HART variables used by the application.
Functional release	Apply controlled loop signals and compare analog values and HART variables with the expected application data.

Abnormal result

If diagnostics, communication or functional response differ from the approved baseline, stop the release and resolve the configuration or installation issue. Do not bypass an interlock or protective function to obtain a passing test.

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05 / Service record and technical references

Lifecycle and support

The current manufacturing and service-support phase for this complete offered reference has not been confirmed.

Technical basis

Yokogawa Analog I/O Modules (for FIO), GS 33J60F60-01EN, 6th edition.

Applicability

The technical data describes the AAI143 base design. Match the complete AAI143-H00 S1 marking, style and installed configuration; do not transfer later suffix approvals or ratings automatically.

Related portfolio references

Yokogawa AFV10D S2

Yokogawa CP451-50 S2

Yokogawa AAI543-S00 S1

Yokogawa SR1B-045N-1KC

Navigation only. These listings are not confirmed replacements, compatible accessories or included items.

Handover record

Retain the complete fitted marking, hardware/software revision where applicable, connection record and accepted test results. Confirm separate accessories and documents in the quotation.

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