# 2094-EN02D-M01-S0

## 01 / System identity and preparation

Allen-Bradley 2094-EN02D-M01-S0 provides the motion-control interface of a Kinetix 6500 modular drive. The control module works with the installed power module, motor feedback and configured EtherNet/IP motion system.

### Engineering context

| | |
|---|---|
| Drive family | Kinetix 6500 |
| Network | EtherNet/IP |
| Safety option | S0 safe torque-off |
| Interface | Separate control and power modules |

### Preparation priorities

| | |
|---|---|
| Axis configuration | Preserve controller, firmware, motion project and drive identities. |
| Power-stage match | Verify the installed power module and rail separately from the control module. |

### Guide boundary

This Apter Power guide organizes identification, preparation and acceptance checks. Use the applicable manufacturer instructions and approved site procedure for detailed wiring, mounting, firmware operations and testing.

**Product and installation enquiries**

sales13@apterpower.com | +86 18030235313

Apply manufacturer instructions and approved site procedures.

# 02 / Configuration review before service

| | |
|---|---|
| Axis configuration | Preserve controller, firmware, motion project and drive identities. |
| Power-stage match | Verify the installed power module and rail separately from the control module. |
| Feedback and IOD | Restore the exact S0 safety and feedback wiring, including encoder supply selection. |
| Safety acceptance | Validate the machine stop/reset behavior and controlled motion test; STO is not electrical isolation. |

## Retain the S0 safety identity

Match the full 2094-EN02D-M01-S0 reference. Do not substitute S1 safe-speed assumptions for the installed safe torque-off configuration.

## Isolate hazardous energy

Follow drive isolation and DC-bus discharge procedures before handling hardware. Safe torque-off does not remove hazardous electrical voltage.

## 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

## Compare the power module

Match the control module with its approved Bulletin 2094 power module and power rail. Do not assign power-stage current or voltage ratings to the control module.

## Restore connector assignments

Check the 44-pin IOD and 15-pin MF wiring against the exact safety and feedback execution. Avoid inferring pin functions from physical connector similarity.

## Key hardware references

| | |
|---|---|
| Module role | Servo-drive control module |
| Network interface | EtherNet/IP |
| Safety execution | S0 safe torque-off |
| IOD connector | 44-pin I/O, safety and auxiliary feedback |

## 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

## Verify feedback power

Use the feedback-device requirements and drive instructions to select the correct encoder supply connection. Do not join 5 V and 9 V supply pins.

## Validate motion and safety

Restore the axis and network configuration, resolve diagnostics and perform the approved motion and safety acceptance tests before enabling production.

## Acceptance checkpoints

| | |
|---|---|
| Before energization | Verify the installed power module and rail separately from the control module. |
| Configuration review | Restore the exact S0 safety and feedback wiring, including encoder supply selection. |
| Functional release | Validate the machine stop/reset behavior and controlled motion test; STO is not electrical isolation. |

## 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

Rockwell Automation identifies this catalog number as discontinued from 31 December 2025. Engineering replacement requires review of the complete axis and safety configuration.

## Technical basis

Rockwell Automation Kinetix 6200 and Kinetix 6500 Control Modules, 2094-IN012C-EN-P (August 2013); Modular Servo Drives User Manual, 2094-UM002I-EN-P (December 2022).

## Applicability

Interface and safety entries describe the S0 control module; complete-drive ratings depend on the matched power stage.

## Related portfolio references

Allen-Bradley 2094-BM01-S

Allen-Bradley 2093-AM01

Allen-Bradley 2094-BC02-M02-S

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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