Siemens 6SL3055-0AA00-5AA3

01 Resolver identity

1 Capture the resolver identity

Record the motor and resolver data, pole count and transformation ratio. Compare these with the installed 5AA3 module rather than accepting connector fit as proof of electrical compatibility.

2 Secure the feedback-controlled axis

Place the drive and mechanical axis in their approved maintenance state. Account for holding loads and possible motion before disconnecting resolver feedback or altering the drive topology.

Electronics supply	24 V DC, 20.4–28.8 V
Current without encoder system	≤0.20 A

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02 Supply and windings

1 Check the electronics supply

Verify 24 V DC within the 20.4–28.8 V range and assess the complete encoder-system load. Investigate unstable supply voltage before treating feedback faults as a resolver or module defect.

2 Review winding characteristics

Compare resolver resistance and inductance with the permitted evaluation conditions. Retain the 0.5 transformation-ratio requirement and the fixed excitation-voltage behavior when assessing a replacement resolver.

Current with encoder system	≤0.35 A
Power loss	≤10 W

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03 Timing and cable

1 Preserve excitation timing

Check the drive's current-controller timing and the module's supported 5–16 kHz excitation range. Do not transfer the narrower range of another execution or change timing without reviewing the feedback application.

2 Inspect resolver cabling

Trace the full cable route and connector assignment, keeping excitation and secondary signals correctly paired. Check shielding, continuity and mechanical condition within the 130 m cable limit using the approved procedure.

Resolver transformation ratio	0.5
Excitation voltage	4.1 V RMS, not parameterizable

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04 Earth and feedback

1 Restore the housing earth

Reconnect the specified PE path at the housing and apply the prescribed connection method and torque. Keep protective earth and signal shielding functions consistent with the installation design.

2 Verify drive feedback configuration

Restore resolver pole count, motor data and the intended sensor-module topology. Review the evaluation-speed boundary for the actual sampling interval before enabling motion.

Excitation frequency for 5AA3	5–16 kHz
Secondary-track amplitude threshold	1 V RMS

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05 Axis acceptance

1 Check feedback during controlled movement

Use the approved low-risk commissioning procedure to compare direction, position and speed feedback. Observe amplitude-related diagnostics and resolve wiring or scaling errors before releasing the axis to normal duty.

2 Release the verified axis

Record resolver identity, supply and cable checks and the final feedback test. Restore normal drive operation only after the electrical feedback path and the mechanical response agree with the commissioned design.

Technical basis: Siemens SINAMICS S110 Manual, 6SL3097-4AC10-0BP1.

Related product navigation

Siemens 6ES7392-1AJ00-0AA0

Siemens 6EP1336-3BA00

These are related references, not confirmed substitutes or an automatically approved assembly.