Siemens 6ES7361-3CA01-0AA0

01 Identify rack number and link direction

1. Identify the expansion rack number and trace its incoming and onward connectors. Associate each installed module with its configured slot and field function. Record the local 24 V supply and separate field-load feeds so that the interface electronics budget is not confused with actuator or sensor loading.

2. An apparently identical expansion cabinet can have a different link direction or application assignment.

Acceptance observation	Rack identity, connector direction and supply responsibilities are documented together.
Evidence to retain	Connection map and approved baseline
Release boundary	Use the applicable SIMATIC S7-300 instructions and the approved application acceptance criteria.

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02 Calculate local electronics loading

1. Sum the local modules drawing from the backplane and compare their demand with the available backplane current. Check the interface supply under the intended installed load, including cable drop and return integrity. Keep the rack and any dependent downstream racks in the agreed maintenance state.

2. A normal unloaded voltage at the cabinet supply does not prove adequate voltage at the interface terminals.

Acceptance observation	The local supply and backplane budget support the actual module population.
Evidence to retain	Isolation and supply assessment
Release boundary	Use the applicable SIMATIC S7-300 instructions and the approved application acceptance criteria.

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03 Restore 24 V supply and chain connectors

1. Restore the local supply and the correct incoming and outgoing chain connections. Inspect the specified inter-rack cable and the distance to the next interface. Confirm the upstream CPU and interfaces are in their expected state before diagnosing a local group error solely from the IM361 indicators.

2. If the 5 V indicator and SF are both on, examine upstream and downstream chain conditions as separate diagnostic branches.

Acceptance observation	The rack has local backplane power and the correct communication relationship.
Evidence to retain	Restored interface and configuration
Release boundary	Use the applicable SIMATIC S7-300 instructions and the approved application acceptance criteria.

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04 Compare local and downstream diagnostics

1. Observe the local rack together with the following rack while checking diagnostics. Exercise representative I/O points and compare their physical locations with the controller image. If an intermittent event affects only later racks, investigate the onward path rather than changing the local rack configuration without evidence.

2. A local point test cannot prove continuity to later interfaces; test both sides of the suspected boundary.

Acceptance observation	Data remains valid at the intended rack and continues correctly downstream.
Evidence to retain	Measured response and diagnostic state
Release boundary	Use the applicable SIMATIC S7-300 instructions and the approved application acceptance criteria.

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05 Verify restart states before process release

1. Review the restored output states before removing process inhibits. Confirm that a controlled restart produces the approved rack and application behavior, then return field equipment to normal authority. Retain the electronics-load calculation separately from the field-load power schedule for future additions.

2. Unexpected output behavior after communication recovery requires application review before releasing the equipment.

Technical basis: Siemens S7-300 Module Data, A5E00105505-AK.

Related product navigation

Siemens 6ES7332-5HB01-0AB0

Siemens 6ES7511-1AK02-0AB0

Siemens 6ES7405-0KA02-0AA0

Related products for separate application assessment; verify the platform and interface. No interchangeability is implied.