Siemens 6DS1144-8AA

01 Redundant buses

1 Map the redundant paths

Identify both AS 235H processor paths and the extension served by this EAVU. Record X3/X4 routing and the cabinet position so the replacement is not connected to the wrong redundant pair or extension bus.

2 Establish the maintenance state

Follow the AS 235H procedure for the affected I/O extension and process. Identify the active master and the consequences of losing this extension before isolating supplies or disturbing ribbon connections.

Processor-side bus connections	2 redundant paths
I/O-side bus connections	1 extension bus

02 Supply diagnosis

1 Record fuse and LED positions

Photograph F1/F2/F3 and the supply, PS, PM and grouped-error indications. Their separate functions are useful evidence; replacing all fuses without identifying the failed circuit can conceal the cause of a fault.

2 Check both supply domains

Verify L+ within 19–33.5 V and the bus supply within 4.5–5.5 V using the correct references. A valid 24 V reading alone does not establish that the 5 V bus circuitry is operating.

Nominal L+ supply	24 V DC
L+ supply range	19–33.5 V DC

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03 Rack connections

1 Inspect the ribbon interfaces

Examine both 50-pin connections for damaged contacts, incorrect insertion and strained cabling. Preserve the processor-path allocation and compare the final routing with the recorded rack layout before reseating the assembly.

2 Retain the cabinet jumpers

Keep the existing extension address and backplane configuration associated with the correct rack. Do not transfer a module into a different extension and assume the retained cabinet settings are suitable without checking the system design.

L+ current	100 mA, plus PS/PM loads
Nominal bus supply	5 V DC

04 Master-path checks

1 Restore the fused circuits

Use only the specified fuse characteristic and rating at the correct position. Investigate a recurring fuse failure and account for possible circuit backfeed; follow the manufacturer's isolation procedure before handling the assembly.

2 Observe master control

After controlled restoration, check which processor path controls the I/O bus and whether the corresponding status agrees with the intended master. A supply LED alone is not evidence of correct bus selection.

Bus supply range	4.5–5.5 V DC
5 V current demand	300 mA

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05 Extension acceptance

1 Test the redundancy response

Carry out the approved AS 235H switchover and diagnostic tests for this extension. Confirm that process I/O remains consistent with the designed response and that comparator or grouped-error indications are resolved.

2 Document the extension state

Record the restored bus routing, supply checks and redundancy-test results. Retain any fault history that distinguishes supply loss, ribbon connection problems and comparator conditions before returning the extension to normal service.

Technical basis: Siemens TELEPERM M I/O Modules, EAVU C79000-T8076-C343-02.

Related product navigation

Siemens 6ES7216-2AD23-0XB8

Siemens 6ES7215-1BG40-0XB0

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