Siemens 6GK7342-5DA02-0XE0

01 Capture the bus assignment

1. **Capture the bus assignment**
2. Confirm the rack path
3. Restore fieldbus wiring
4. Load and exercise the exchange
5. Validate process handover

Work sequence

Save the STEP 7 station and network configuration. Record the PROFIBUS address, rate, DP role, I/O buffer lengths and connections. Identify the CPU blocks that exchange data and establish a controlled process state before disconnecting a live segment.

Acceptance condition

The hardware identity and network configuration are recoverable independently of the installed CP.

PROFIBUS interface	RS-485; 9-pin D-sub female
Transmission rates	9.6 kbit/s to 12 Mbit/s; discrete configured rates

Consistent buffers: Treat CPU data-area updates and communication-block completion as one application design problem. Partial updates can produce inconsistent process information.

Record the observed condition, test method and result for this stage. Resolve any difference before moving to confirm the rack path.

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02 Confirm the rack path

1. Capture the bus assignment
2. **Confirm the rack path**
3. Restore fieldbus wiring
4. Load and exercise the exchange
5. Validate process handover

Work sequence

Isolate the station supply and verify the target rack carries the S7 communication bus. Inspect the interconnector and power terminals; do not place the CP behind an IM365 expansion link. Retain the approved reference-potential grounding arrangement.

Acceptance condition

The rack, backplane and supply arrangement meet the DA02 installation requirements.

Master input / output area	2160 bytes each
Data per slave as master	244 input bytes / 244 output bytes maximum

Electrical segment: A/B assignment, shield bonding and termination belong to the entire RS-485 segment. Check both ends before blaming the CP for communication errors.

Record the observed condition, test method and result for this stage. Resolve any difference before moving to restore fieldbus wiring.

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03 Restore fieldbus wiring

1 Capture the bus assignment

2 Confirm the rack path

3 **Restore fieldbus wiring**

4 Load and exercise the exchange

5 Validate process handover

Work sequence

Trace A/B conductors, shield connection and termination at the segment ends. Reconnect the electrical bus without changing node addresses on neighboring stations. Review cable length against the configured transmission speed.

Acceptance condition

The physical bus matches the retained topology and has no unintended extra termination.

Supply	24 V DC
Typical supply current	0.25 A at 24 V

Version-sensitive behavior: Retain the DA02 identity when reviewing slave functions and application blocks; later DA03 features do not retroactively change this hardware.

Record the observed condition, test method and result for this stage. Resolve any difference before moving to load and exercise the exchange.

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04 Load and exercise the exchange

1. Capture the bus assignment
2. Confirm the rack path
3. Restore fieldbus wiring
4. **Load and exercise the exchange**
5. Validate process handover

Work sequence

Restore the correct configuration through an available engineering path; use MPI for changed bus parameters. Run the approved application and inspect communication-block completion and status. Exercise more than one buffer segment where the configured transfer requires it.

Acceptance condition

Configured slaves exchange the intended data with stable status and consistent CPU buffers.

Power loss	6 W
Minimum slave interval	2 ms

Consistent buffers: Treat CPU data-area updates and communication-block completion as one application design problem. Partial updates can produce inconsistent process information.

Record the observed condition, test method and result for this stage. Resolve any difference before moving to validate process handover.

Siemens 6GK7342-5DA02-0XE0

05 Validate process handover

1. Capture the bus assignment
2. Confirm the rack path
3. Restore fieldbus wiring
4. Load and exercise the exchange
5. **Validate process handover**

Work sequence

Compare received values with field conditions and confirm output response under controlled demand. Check recovery following the approved communication fault test, then retain the final CPU/CP configuration and diagnostics.

Acceptance condition

The complete application response, including loss and restoration of communication, is accepted.

Horizontal ambient	0 to 60 °C
Vertical ambient	0 to 40 °C

Siemens 6ES7531-7KF00-0AB0

Siemens 6ES7392-1AJ00-0AA0

Siemens 6ES7331-1KF02-0AB0

Related products require separate compatibility assessment. Retain the final configuration and signed test outcome.