Siemens 6ES5734-1BD20

01 Identify the serial partners

01

PC RS232 port

Establish which equipment and settings must survive the intervention. Treat the field connection, configured function and recovery information as separate evidence, so that a replacement does not silently change the application.

Identify the serial partners — field actions

Record the service-PC port and exact target CPU or panel variant. Check which programming or data-transfer function is required.

Configuration identified

Both the electrical standards and intended transfer role are known.

Identify the serial partners — acceptance record

Converted interfaces	RS232 / TTY. Compare this design reference with the installed hardware before work.
TTY signalling	20 mA current loop. Record the actual selection or measured condition and resolve any mismatch.

Configuration record	Hardware identities and original settings retained
Following activity	Inspect the conversion path

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02

Active converter

Protect the installation boundary before making connections. Mechanical retention, electrical isolation and the condition of mating parts must agree with the intended service procedure; resolve visible damage before proceeding.

Inspect the conversion path — field actions

Keep the active RS232/TTY converter in the connection. Inspect connectors and any 25-to-9-pin adapter for damage or incorrect wiring.

Mounting / circuit accepted

The assembly matches the required serial interfaces rather than only the connector shape.

Inspect the conversion path — acceptance record

Cable assembly length	3.2 m. Compare this design reference with the installed hardware before work.
CPU-side connector	15-pin. Record the actual selection or measured condition and resolve any mismatch.

Installation record	Inspected interfaces and resolved defects retained
Following activity	Prepare the engineering workstation

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03

TTY current loop

Reconcile the selected interfaces with the actual connected equipment. A matching connector or plausible value alone does not establish the intended signal path. Use the identified hardware and configuration to guide the checks.

Prepare the engineering workstation — field actions

Select the correct serial port, driver and supported engineering environment. Validate any USB serial adapter before relying on it for recovery.

Connections reconciled

The workstation can address the intended serial interface without an unexplained driver or port conflict.

Prepare the engineering workstation — acceptance record

PC-side connector	25-pin. Compare this design reference with the installed hardware before work.
Conversion architecture	Integrated RS232/TTY converter. Record the actual selection or measured condition and resolve any mismatch.

Connection record	Final wiring and configuration assignments retained
Following activity	Establish read-only communication

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04

Compatible target

Evaluate the complete operating response with the process in its approved test state. Separate a valid local indication from successful end-to-end behavior, and retain the conditions under which the observed result was obtained.

Establish read-only communication — field actions

Connect under the approved equipment-service procedure and read target identity and diagnostics before attempting a download.

Functional response accepted

The responding device is the intended target and the connection is stable.

Establish read-only communication — acceptance record

PC interface requirement	Serial RS232. Compare this design reference with the installed hardware before work.
9-pin PC port	Correct 25-to-9-pin serial adapter required. Record the actual selection or measured condition and resolve any mismatch.
Response record	Test conditions, observed response and deviations retained
Following activity	Verify the permitted transfer function

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05 Verify the permitted transfer function

05

Recovery connection

Return the equipment to service only after the affected functions and recovery behavior have been accepted. Preserve the final configuration, remaining restrictions and test outcome for the next maintenance intervention.

Verify the permitted transfer function — field actions

Preserve the existing project, perform only the authorized transfer and confirm the resulting online state. Record the successful PC, adapter and software combination.

Return-to-service evidence

The intended operation is complete and a repeatable recovery connection is documented.

Separate related-equipment review

Siemens 6ES7222-1BH32-0XB0

Siemens 6ES7307-1EA01-0AA0

Siemens 6ES7532-5HF00-0AB0

Assess each related item independently; these references do not establish replacement compatibility.