Siemens 6ES7134-4JB51-0AB0

01 Preserve the sensor configuration

1 Preserve the sensor configuration
2 Connect the correct topology
3 Verify conversion timing
4 Compare controlled resistance values
5 Release temperature supervision

Work sequence

Record sensor type, range, wire count, active channels, rejection frequency and smoothing. Identify current-excitation and measurement conductors at the terminal base before disconnecting any sensor.

Acceptance condition

The retained configuration describes both the electrical wiring and the interpreted engineering value.

Inputs, 3/4-wire	2
Inputs, 2-wire	4

Terminal reuse: Changing between two-channel and four-channel modes changes the role of some terminals. Validate the actual terminal assignment.

Record the observed condition, test method and result for this stage. Resolve any difference before moving to connect the correct topology.

Siemens 6ES7134-4JB51-0AB0

02 Connect the correct topology

1 Preserve the sensor configuration

2 Connect the correct topology

3 Verify conversion timing

4 Compare controlled resistance values

5 Release temperature supervision

Work sequence

Restore two-, three- or four-wire connections using the terminal roles for the selected mode. Keep the load supply off sensor terminals and inspect shields and contact resistance.

Acceptance condition

The physical connection matches the selected channel mode with no power misconnection.

Resistance ranges	150, 300 and 600 ohm; PTC
RTD resolution	15 bit plus sign

Response budgeting: Conversion, wire-break diagnosis, active-channel count and smoothing all contribute to effective response time.

Record the observed condition, test method and result for this stage. Resolve any difference before moving to verify conversion timing.

Siemens 6ES7134-4JB51-0AB0

03 Verify conversion timing

1. Preserve the sensor configuration
2. Connect the correct topology
3. **Verify conversion timing**
4. Compare controlled resistance values
5. Release temperature supervision

Work sequence

Review active-channel count, mains rejection and wire-break diagnosis. Confirm the smoothing factor and evaluate whether the combined delay suits the monitored process.

Acceptance condition

The acquisition timing is understood and acceptable for the application.

Sensor excitation	1.65 mA; PTC maximum 1.65 mA
Shielded cable length	200 m maximum

Sensor boundary: Keep load power away from measurement inputs and account for the absence of isolation between measurement channels.

Record the observed condition, test method and result for this stage. Resolve any difference before moving to compare controlled resistance values.

Siemens 6ES7134-4JB51-0AB0

04 Compare controlled resistance values

1. Preserve the sensor configuration
2. Connect the correct topology
3. Verify conversion timing
4. **Compare controlled resistance values**
5. Release temperature supervision

Work sequence

Use an appropriate sensor simulator or known resistance under the approved procedure. Compare raw and engineering values across relevant operating points and inspect readable diagnostics.

Acceptance condition

The configured sensor curve, range and channel assignment produce the expected values.

Load-supply current	30 mA maximum
Power loss	0.6 W typical

Terminal reuse: Changing between two-channel and four-channel modes changes the role of some terminals. Validate the actual terminal assignment.

Record the observed condition, test method and result for this stage. Resolve any difference before moving to release temperature supervision.

Siemens 6ES7134-4JB51-0AB0

05 Release temperature supervision

1. Preserve the sensor configuration
2. Connect the correct topology
3. Verify conversion timing
4. Compare controlled resistance values
5. **Release temperature supervision**

Work sequence

Reconnect the actual sensor, check a plausible stable value and test required fault or process responses. Retain final settings and accepted measurements before removing maintenance substitutions.

Acceptance condition

Normal sensing and required diagnostic behavior are restored.

3/4-wire address space	4 bytes
2-wire address space	8 bytes

Siemens 6ES7390-1AE80-0AA0

Siemens 6ES7334-0CE01-0AA0

Siemens 6ES7138-4CA01-0AA0

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