Siemens 6AV6642-0BA01-1AX0

01 Preserve the TP177B project and connection

Preserve the TP177B engineering project, runtime compatibility information, alarm and recipe data, and the MPI/PROFIBUS or Ethernet settings. Identify the controller tags behind operator commands and record the access levels required to use them. Check that the recovery method can restore the project, rather than relying on an image of the visible screens.

If a backup is not usable with the intended engineering environment, resolve recovery before removing the installed panel.

Acceptance observation	The retained files and connection settings support an actual panel restoration.
Evidence to retain	Connection map and approved baseline
Release boundary	Use the applicable SIMATIC HMI instructions and the approved application acceptance criteria.

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02 Separate touch testing from live commands

Place machine commands in the approved inhibited state before testing the touch interface or replacing the panel. Inspect the front seal separately from the rear cabinet connections. Check the power feed and supported MMC arrangement without assuming that arbitrary removable media or a similar connector is suitable.

A good enclosure appearance does not validate the rear wiring or make a live touchscreen command safe for calibration testing.

Acceptance observation	The panel can be handled and tested without issuing an unintended process command.
Evidence to retain	Isolation and supply assessment
Release boundary	Use the applicable SIMATIC HMI instructions and the approved application acceptance criteria.

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03 Restore the configured controller endpoint

Restore the project and the MPI/PROFIBUS or Ethernet with the correct controller endpoint. Check changing values at both the controller and panel, then compare units and tag destinations. Retain the original baseline until the new runtime and connection have been demonstrated under controlled conditions.

If screens render but values remain static, investigate connection configuration and diagnostics before changing screen objects.

Acceptance observation	Displayed process values update from the intended controller tags.
Evidence to retain	Restored interface and configuration
Release boundary	Use the applicable SIMATIC HMI instructions and the approved application acceptance criteria.

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04 Prove alarms, recipes and timestamps

Generate an authorized test alarm and trace its acknowledgement back to the controller. Check a permitted setpoint or recipe transfer against controller limits and destination tags. Include clock synchronization after power interruption in the acceptance sequence so that a hardware-specific behavior is not concealed by a general screen test.

A message disappearing from the panel does not alone prove the controller alarm or associated machine state has been reset.

Acceptance observation	Operator actions, alarm states and the model-specific check behave as designed.
Evidence to retain	Measured response and diagnostic state
Release boundary	Use the applicable SIMATIC HMI instructions and the approved application acceptance criteria.

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05 Return control to the approved operator level

Restore normal operator access only after commands, indications and clock synchronization after power interruption have passed the agreed tests. Remove temporary test data and confirm that the production recipe and communication settings remain intact. Retain the accepted project and recovery files together with the installed TP177B hardware identity.

Unexpected commands or stale values after restart require investigation before the panel is returned to normal service.

Technical basis: Siemens product data sheet, 6AV6642-0BA01-1AX0.

Related product navigation

- Siemens 6AV2124-0JC01-0AX0
- Siemens 6AV6648-0EC11-3AX0
- Siemens 6AV6642-0EA01-3AX0

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