ABB CP651-WEB-1SAP551200R0001

01 Industrial Web Visualization Touch Panel / system role

Product function

ABB CP651-WEB-1SAP551200R0001 presents the controller-hosted visualization at the machine while network settings and the running controller project determine the displayed process information.

Selected configuration

The WEB execution is intended for the AC500 V2.3 web-server visualization. It is distinct from the CP651 execution used for PB610 applications, so application compatibility must be checked against the complete WEB identity rather than the common display hardware.

Integration checkpoints

- Machine-side web visualization
- Process-value supervision
- Controlled operator interaction
- Panel replacement planning

Visualization role	AC500 V2.3 web-server client
Operator input	Single-touch resistive screen
Installation boundary	Sealed panel front and protected cabinet rear

Two Ethernet interfaces and configurable serial hardware are present, but physical ports do not establish that every possible protocol is available to the running visualization. Retain the browser environment, controller address and project relationship when preparing a replacement.

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02 Technical operating envelope

Display	10.4-inch TFT-LCD	Supply range	18-32 V DC
Resolution	800 x 600 pixels	Current at 24 V DC	1.0 A
Touch input	Four-wire resistive, single touch	Ethernet interfaces	Two 10/100 Mbit/s ports
Display colors	65,536	Operating temperature	0-50 degrees C
Brightness	300 cd/m2	Protection	IP66 front; IP20 rear

Apply the CP651-WEB-1SAP551200R0001 execution and the stated configuration-dependent limits; shared family material does not assign features from another variant.

WEB application boundary

Use the controller-hosted AC500 V2.3 visualization appropriate to the WEB execution. Do not treat a PB610 project for ordinary CP651 as an automatically compatible replacement application.

Communication and operation

Validate page loading, live variable updates and permitted operator commands separately. A visible page or Ethernet link does not prove that the controller connection remains current.

Enclosure and retention

Respect the IP20 rear-side environment and preserve the configured startup address and system settings. The internal backup battery is not a user-service replacement item.

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03 System integration and applications

Machine-side web visualization

Display the compatible controller-hosted project.

Process-value supervision

Present live values with an identifiable communication state.

Controlled operator interaction

Send permitted actions through the configured controller interface.

Panel replacement planning

Preserve the WEB runtime and the existing visualization relationship.

Application and compatibility boundary

The front and rear have different protection ratings. A properly fitted panel front can serve the operator environment while the rear electronics still require a suitable enclosure, clean supply and acceptable cabinet temperature. The internal rechargeable backup battery is not user-replaceable.

Available unit verification

Check the full CP651-WEB and 1SAP551200R0001 identity, runtime version, display/touch condition and network configuration. Confirm the panel, mounting accessories, supply terminal, network cables and any project or software deliverables in the quotation. Evaluate the actual interfaces and included accessories against the installed arrangement.

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04 Engineering selection decisions

Can a PB610 application be loaded into CP651-WEB-1SAP551200R0001 as though it were an ordinary CP651?

The WEB execution is intended for AC500 V2.3 web visualization and has a different application role. Confirm the supported runtime and project arrangement rather than relying on identical display size.

Why can CP651-WEB-1SAP551200R0001 show a page while its process values are stale?

The page may remain visible after the live controller data path fails. Check variable freshness and communication status, not just successful page rendering.

What should be preserved before replacing CP651-WEB-1SAP551200R0001?

Record the controller address, startup page, browser environment, network settings and the visualization-project relationship. Those settings determine the operator view beyond the panel hardware.

Does the front protection rating of CP651-WEB-1SAP551200R0001 apply to the rear electronics?

No. The rear is IP20 and requires a suitable cabinet environment. Panel-front protection does not permit exposing the rear connections to moisture or contamination.

Can the backup battery in CP651-WEB-1SAP551200R0001 be replaced as a routine field task?

It is an internal rechargeable, non-user-replaceable battery. Handle loss of retained settings through the appropriate service route rather than opening the panel for an unsupported battery change.

Why should operator commands be tested separately from graphics on CP651-WEB-1SAP551200R0001?

A displayed control object does not prove correct permissions, controller addressing or interlocks. Test the permitted command path under controlled machine conditions.

How should a lost controller connection be evaluated on CP651-WEB-1SAP551200R0001?

Confirm that the operator can recognize stale or unavailable data and that commands cannot be mistaken for completed actions. The controller remains responsible for the machine-control interlocks.

Do the physical interfaces on CP651-WEB-1SAP551200R0001 prove protocol compatibility?

No. The installed runtime and controller application determine supported communication. Check the actual WEB environment before assuming that a port provides a desired protocol.

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05 Configuration boundary and references

Lifecycle and support

The current manufacturing and manufacturer-support stage for this exact model is not confirmed.

Replacement assessment

Match the WEB execution and controller visualization environment. A different CP600 panel requires a runtime, network and project-compatibility assessment rather than a display-size comparison alone.

Available unit details

Offered reference: ABB CP651-WEB-1SAP551200R0001. Condition: New, original product. Check the full CP651-WEB and 1SAP551200R0001 identity, runtime version, display/touch condition and network configuration. Confirm the panel, mounting accessories, supply terminal, network cables and any project or software deliverables in the quotation; companion equipment is included only when itemized.

Document roles: The original excerpt retains manufacturer tables and drawings; this brief addresses selection and system context; the separate installation guide covers field procedures and acceptance.

Technical basis: ABB Control Panel CP600 Data Sheet, CP651 / CP651-WEB, 3ADR010245.

Related product navigation

- ABB CI857K01 3BSE018144R1
- ABB CI810B 3BSE020520R1
- ABB CI820V1 3BSE025255R1

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

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