ABB CDP312R

01 Drive Control Panel

ABB CDP312R places drive status, parameter editing and controlled parameter transfer at the maintenance interface. Its operating mode determines how the arrow and ENTER keys act, while local or remote selection determines command authority.

1. Selected drive
2. Panel mode
3. Parameter / status action
4. Verified machine response

Physical and functional arrangement

The display separates a drive-status row from the selected actual values or parameter information. This lets an operator interpret a value together with the active drive identity and control state rather than treating an isolated number as confirmation of the process condition.

Signal path and configuration

Parameter editing and data transfer use different panel modes. A parameter upload retains drive values in the panel; a subsequent download must be matched to the destination firmware and motor application. Standard download handling excludes motor-identification results and the motor/option groups that require separate attention.

Application boundary

On a panel link with multiple drives, every station needs a distinct ID. Before issuing a start, stop, reference or reset command, confirm the selected drive and control authority. Return the drive to its required external-control state before removing the panel from a service position.

Ratings apply to the stated hardware execution and operating conditions. Installed firmware, companion modules and configured functions must match the application.

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02 Technical data and engineering limits

Display	LCD, 4 lines × 20 characters
Actual signals displayed	3 simultaneously
Operating modes	ACT, PAR, FUNC, DRIVE
Control keys	7 drive-control functions
Idle display return	Actual-signal mode after 1 minute
Default drive ID	1
Default download groups	1–97
Excluded by default	Groups 98/99 and motor-identification results

Additional interface data

ACT workflow	Select actual values; inspect and reset fault history
PAR workflow	Select parameter group and value; accept edits with ENTER
FUNC workflow	Assistants, upload, download and contrast
DRIVE workflow	Select a linked drive and manage its ID
Start-up assistant exclusions	Scalar mode, locked parameters or assistant selection disabled
Fault-history clearing	Unavailable while faults or warnings remain active

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03 Application map and integration boundaries

01 Local commissioning

Set approved drive parameters while observing drive identity and control state.

02 Maintenance diagnostics

Review actual signals and fault history before disturbing the installation.

03 Controlled parameter transfer

Copy a verified source configuration to a compatible destination with separate motor and option checks.

04 Shared panel link

Select and identify one drive at a time in an engineered multi-drive panel connection.

Command authority

Panel navigation does not change the responsibility for local and external control. Confirm the selected drive and control state before issuing commands.

Parameter-copy boundary

Keep a verified parameter backup and separate motor-identification and option configuration from the normal download scope.

Fault interpretation

Retain fault history before reset. Compare displayed faults with the drive state and the actual machine condition.

Configuration scope: Match the compatible drive and firmware/application family. Validate command authority and retained parameters after panel replacement.

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04 Technical questions that affect operation

Why can an assistant be unavailable on CDP312R?

Check whether scalar motor control, parameter lock or disabled assistant selection is active. These conditions can prevent the Start-up Assistant from being offered.

What does a download from CDP312R leave outside its normal transfer scope?

Motor identification results and parameter groups 98 and 99 are excluded by default. Treat motor and option configuration as a separate commissioning responsibility.

Why should an upload precede copying parameters with CDP312R?

An upload captures the intended source settings. Downloading from an unverified panel memory can transfer settings from a different drive application.

How does CDP312R prevent confusion between linked drives?

The status and DRIVE modes identify the selected station. Each online drive needs a unique ID, which must be confirmed before control or parameter actions.

Why might fault history refuse to clear on CDP312R?

Active faults or warnings prevent fault-history reset. Resolve the active condition and preserve useful diagnostic information before clearing the record.

Which state should be restored before removing CDP312R from a drive?

Return the drive to the required remote or external operating state. Removing a panel while relying on local control can interrupt the intended control arrangement.

Can a matching panel prove that two drives accept the same parameter copy from CDP312R?

No. Verify destination firmware, application program, motor data and option configuration before transferring settings.

How should a changed value on CDP312R be verified after editing?

Confirm the accepted parameter value, the intended drive identity and its effect on actual operation. A displayed edit alone is not proof of the complete control response.

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05 Selection, service planning and related equipment

Match the installed arrangement

Match the complete ABB CDP312R marking and installed configuration. Confirm the CDP312R panel marking, keys, display and drive connection.

Support and migration

The current production and manufacturer-support stage for this exact execution is unconfirmed. Match the compatible drive and firmware/application family. Validate command authority and retained parameters after panel replacement.

Equipment boundary

Confirm the control panel and any mounting kit or connecting cable specifically itemized. Companion hardware and accessories are included only when itemized; the function of the complete installed arrangement depends on the correct combination.

Engineering review before intervention

Identify the selected drive	Read the drive ID, control-state indicator and run state before making changes. Record the firmware/application identity and establish the approved machine maintenance state. On a panel link, confirm that the station address belongs to the intended drive.
Preserve the current settings	Capture the source configuration before editing or copying. Keep motor data and option-module settings separately because they are not covered by a normal groups 1–97 download. Label the backup with the installed drive identity.

Related equipment navigation

ABB PM860K01 3BSE018100R1

ABB PM866K01 3BSE050198R1

ABB PM825 3BSE010796R1

Related references support separate application assessment and do not imply replacement compatibility. Technical basis: ABB ACS800 Standard Control Program Firmware Manual, 3AFE64527592 Rev. L.