01 / Product and system dashboard

ABB

BCU-12 3AUA0000110430

Drive Control Unit

Product role

ABB BCU-12 3AUA0000110430 is a converter control unit with seven fiber-optic connections and integrated converter-data logging.

BCU-12
Control program and I/O

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V1–V7
Fiber-optic branches

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Converters
Controlled power modules

Engineering scope

Hardware values describe BCU-12. From internal BCON-12 revision R, compatibility with older firmware and bootloaders is restricted; confirm the actual hardware and software combination before replacement.

02 / Verified identity and technical relationships

Property	Applicable fact	Property	Applicable fact
Function	Converter control via fiber-optic links	Analog inputs	2 differential; −10…+10 V or −20…+20 mA
Optical channels	7, V1–V7	Analog outputs	2; 0–20 mA, load <500 ohms
External supply	24 V DC ±10%, 2 A	Relay outputs	3; 250 V AC / 30 V DC, 2 A
Redundant supply inputs	Two connections at XPOW	Drive-to-drive interface	RS-485 at XD2D
Digital inputs	6, DI1–DI6	Diagnostic memory	SDHC; maximum 8 GB
Configurable digital I/O	2, DIO1 and DIO2	Control-panel interface	RJ-45 at X13, cable <3 m

Configuration boundary

Hardware values describe BCU-12. From internal BCON-12 revision R, compatibility with older firmware and bootloaders is restricted; confirm the actual hardware and software combination before replacement.

03 / Applications and system integration

Converter coordination

Use the seven optical branches to connect the converter modules specified for the drive arrangement.

Fault-data capture

Collect real-time converter data on the SDHC card for structured service analysis.

Drive control interfaces

Connect configured analog, digital and relay signals using the terminal assignments and load limits.

Drive hardware maintenance

Preserve converter identity, control-program memory and compatible firmware when replacing the control unit.

Functional context

The control interfaces include six digital inputs, two configurable digital inputs/outputs, two differential analog inputs, two analog outputs and three relay outputs. Analog inputs support −10 to +10 V or −20 to +20 mA selection; analog outputs provide 0–20 mA into a load below 500 ohms. XPOW accepts two external 24 V DC supplies for redundancy.

04 / Service and installation decisions

Isolate the drive

Follow the drive safety instructions and verify discharge before accessing the control unit.

Check hardware revision

Review the BCON-12 revision and firmware compatibility, especially revision R and later.

Match optical pairs

Retain optical channel assignments and equal cable-pair lengths.

Select analog mode

Match current or voltage input selection to the connected signal source.

Protect stored data

Do not remove the SDHC card while WRITE is lit; do not exchange converter memory while powered.

Validate configuration

Confirm the correct control program, converter hardware and safety interfaces before releasing the drive.

05 / Reference basis and related portfolio

Lifecycle and supply

A current manufacturer lifecycle phase has not been confirmed. Request current support and replacement guidance using the complete BCU-12 3AUA0000110430 identity. Apter Power availability is confirmed separately in the quotation.

Reference basis

ABB BCU-02/12/22 Control Units Hardware Manual, 3AUA0000113605 Rev. D; ABB 3AUA0000110430 product information.

Apter Power technical summary; not a manufacturer-issued manual. Apply the original instructions for the actual installation.

Related industrial automation products

Navigation only; no substitution or compatibility claim.

ABB NGDR-07C-NGDR-07-FF650R17IE4

ABB SDCS-PIN-4-COAT 3ADT314100R1001

ABB SDCS-PIN-4B 3ADT316300R1510

Discuss your installed configuration

Send the full unit marking and connection details.

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