

MANUFACTURER-SOURCE TECHNICAL REFERENCE

# ABB RDCU-12C-3AUA0000036521

## Control Unit Integration Guide

ACS800 drive control unit containing an RMIO-12C motor-control and I/O board

### DOCUMENT SCOPE

Independent Apter Power manual compiled only from the cited ABB manufacturer sources. No product photograph is included.

|                           |                                                                   |
|---------------------------|-------------------------------------------------------------------|
| Product / lookup identity | ABB RDCU-12C-3AUA0000036521                                       |
| Reference number          | 3AUA0000036521                                                    |
| Document basis            | Published ABB product records, PDFs, and manuals listed on page 3 |



### Product page

<https://www.apterpower.com/ABB/rdcu-12c-3aua0000036521>

### Apter Power contact

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## Drive-control integration path

ABB RDCU-12C is an ACS800 drive control unit built around the RMIO-12C motor-control and I/O board. It accepts three analogue inputs, six programmable 24 V digital inputs plus a start-interlock input, and provides two analogue outputs and three relay outputs for external control and status signals.

|    |                                                                                                                                                           |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 01 | External analogue inputs, programmable digital inputs and the DIIL start-interlock signal enter the RMIO-12C motor-control and I/O board inside RDCU-12C. |
| 02 | The loaded ACS800 application program processes those control and feedback signals according to the matched converter configuration.                      |
| 03 | RDCU-12C exchanges control data with the inverter or IGBT-supply power section over ABB's 10 MBd PPCS optical-fibre link.                                 |
| 04 | Two analogue outputs and three relay outputs return documented command, indication or status interfaces to external equipment.                            |
| 05 | Permitted RAIO, RDIO, RTAC, RPBA/RMBA and RDCO options extend I/O, encoder-feedback, fieldbus or DDCS functions where the host manual supports them.      |

## I/O and host context

|    |                                                                                                                                                                                                            |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 01 | ABB directly verifies programmed variant 3AUA0000036521P. The exact unaffixed base code 3AUA0000036521 was not verified on a direct ABB-hosted product page in the cited sources, so the physical label... |
| 02 | Confirm whether the physical unit carries unaffixed 3AUA0000036521 or programmed-variant code 3AUA0000036521P; the P suffix must not be omitted for a programmed unit.                                     |
| 03 | The loaded SW TYPE, SW CODE and DEVICE TYPE must correspond to the converter hardware and original order before commissioning.                                                                             |

## Control-unit readiness checklist

|    |                                                                                                                                     |
|----|-------------------------------------------------------------------------------------------------------------------------------------|
| 01 | Only qualified electricians may install or service the control unit or drive.                                                       |
| 02 | Disconnect every power source, prevent reconnection, wait five minutes and verify that the power section is discharged before work. |
| 03 | Use ESD precautions and avoid touching RMIO circuitry or connector contacts.                                                        |
| 04 | Do not force connectors or the enclosure cover during installation.                                                                 |
| 05 | Verify that SW TYPE, SW CODE and DEVICE TYPE correspond to the converter hardware and original order before commissioning.          |
| 06 | Keep cooling airflow unobstructed, avoid mounting above heat sources and maintain the electromagnetic separation specified by ABB.  |

### Identity and release controls

|                       |                                          |
|-----------------------|------------------------------------------|
| Official Product Name | RDCU-12C Control Board - Programmed      |
| Requested Model       | RDCU-12C                                 |
| Verification Status   | MODEL_VERIFIED_UNSUFIXED_CODE_UNVERIFIED |

### Official ABB sources

|                                                                            |                                                                                                                                                                                                                 |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ABB product page: 3AUA0000036521P RDCU-12C Control Board - Programmed      | <a href="https://www.abb.com/global/en/products/3aua0000036521p">https://www.abb.com/global/en/products/3aua0000036521p</a>                                                                                     |
| RDCU-02C, RDCU-12C and RDCU-16C Drive Control Units Hardware Manual, Rev C | <a href="https://library.e.abb.com/public/c23045e0f662a9ddc12574ce0045ed3f/EN_RDCU_HW_C.pdf">https://library.e.abb.com/public/c23045e0f662a9ddc12574ce0045ed3f/EN_RDCU_HW_C.pdf</a>                             |
| ACS800-67LC Wind Turbine Converters Hardware Manual                        | <a href="https://library.e.abb.com/public/4ea69db0f352467a94ff0d77604d674d/EN_ACS800-67LC_HW_C_A4.pdf">https://library.e.abb.com/public/4ea69db0f352467a94ff0d77604d674d/EN_ACS800-67LC_HW_C_A4.pdf</a>         |
| ACS800-04/04M/U4 Drive Modules Hardware Manual                             | <a href="https://library.e.abb.com/public/372c56e182ce42fbabdb886bd8e3cd47/EN_ACS800_04_R7_R8_HW_G_A4.pdf">https://library.e.abb.com/public/372c56e182ce42fbabdb886bd8e3cd47/EN_ACS800_04_R7_R8_HW_G_A4.pdf</a> |