ABB 07EA61R1 GJV3074351R1

Isolated Analog Current Input Module

ABB 07EA61R1 GJV3074351R1 is an eight-channel isolated current-input module for a retained Procontic T200 installation, with an 8-bit conversion design.

Sourcing Support | 12-Month Warranty

Product summary

Manufacturer part number	07EA61R1 GJV3074351R1
Shipping	Swift global dispatch
Condition	New, original product
Shipping size (est.)	3.6cm x 14.5cm x 25cm
Country of Origin	Sweden
Manufacturer	ABB
Product Category	PLC Systems
Spare Part Number	07EA61R1 GJV3074351R1
Weight	0.48 kg

Buyer information / Overview

07EA61 R1 current acquisition and ANAI conversion must be assessed together. The neighboring twelve-bit 07EA63 uses a different raw range and wire-break threshold; a shared 4–20 mA label does not preserve application interpretation.

Independent loop identification

Isolated current channels retain separate transmitter and application assignments.

Raw-to-process traceability

ANAI exposes received and converted values for diagnosing scaling before engineering-unit interpretation.

Fault-aware lower-end interpretation

The error state distinguishes a wire-break result from a valid low-end process value.

The eight isolated 07EA61 R1 channels acquire 4–20 mA signals with eight-bit conversion. Trace each current loop and its supply/return to the assigned application value. The input range does not by itself provide a transmitter-power or absolute-accuracy specification.

The applicable ANAI function-block call selects current mode with U/I = 0 and eight-bit conversion with 8/12 = 1. Its normal raw EA range is 8 to 255 and converted QA range is 0 to 4080. Compare those stages before changing the final engineering-unit scaling.

ANAI detects the documented 07EA61 wire-break condition below 3.6 mA when raw EA is 2 or less, setting ERR to 1 and QA to 0. A zero converted value can therefore have different meanings: inspect EA and ERR together, then verify the receiving application’s actual alarm response under an approved loop test.

Controller platform reference: Procontic T200 analog acquisition. Retain the documented ABB configuration.

Technical Specifications

Analog input channels	8
Current signal range	4 to 20 mA
Conversion resolution	8 bit
ANAI U/I code	0
ANAI 8/12 code	1
ANAI normal raw EA	8 to 255
ANAI normal converted QA	0 to 4080
ANAI wire-break current	<3.6 mA
ANAI wire-break raw EA	<=2
ANAI wire-break ERR / QA	1 / 0

Technical source: ABB Procontic T200 R1 catalogue GATS121401R2003 and ANAI function-block description 2CDC120133M0201. Hardware values describe 07EA61 R1. EA/QA ranges, selector codes and wire-break behavior describe the applicable ANAI call with U/I = 0 and 8/12 = 1, not unconditional module alarm outputs. Retain GJV3074351R1 and the installed application configuration; no absolute accuracy, input burden or sample rate is inferred.
Apter Power product summary. Original technical pages and a field guide are available in Downloads.

Applications / Compatibility

Use the eight-channel current-input hardware with the retained T200 channel allocation and its ANAI conversion call. The complete R1/GJV identity remains the offered reference.

Separate hardware current acquisition, function-block conversion and final process scaling. The twelve-bit 07EA63 has a different conversion/diagnostic relationship.

Eight isolated current loops
Retain the transmitter-to-channel schedule and loop supply/return. Input isolation does not identify the process variable or establish transmitter power.

Eight-bit ANAI conversion
Use current-mode and eight-bit selections for the 07EA61 path. Compare raw and converted values before altering engineering-unit scale.

Wire-break alarm integration
Observe EA, QA and ERR together during the approved fault test. Verify how the application converts that error into its plant alarm.

07EA63 migration review
Compare raw coding, resolution selection and wire-break threshold. A range match alone does not make the twelve-bit module a transparent change.

Product Precautions

Prepare ABB 07EA61R1 GJV3074351R1 using the following checks for its documented interface and system duty.

Identify loop power
Locate the actual transmitter supply before moving current wiring.

Preserve channel assignments
Tag each process-variable channel and return path.

Avoid signal-type substitution
Do not land a voltage-output transmitter on a current channel by analogy.

Use approved injection
Apply the plant loop-test procedure and respect the receiving circuit.

Test diagnostics through the application
Use an authorized loop-fault test to observe raw EA, converted QA, ERR and the actual plant alarm separately.

Do not invent alarm thresholds
Use the actual configured under-range/burnout behavior and documented test method.

Lifecycle Status

The current factory lifecycle phase of 07EA61R1 GJV3074351R1 is unconfirmed. Its R1 hardware provides the documented T200 isolated current-input duty; ANAI conversion behavior belongs to the configured application.

A higher-resolution 07EA63 is not a software-neutral change: its raw range and ANAI wire-break threshold differ from the 07EA61 path. Review conversion selection, channel mapping and alarm handling before considering that change.

The input module is separate from transmitters, loop supplies and field wiring; their inclusion is identified independently.

Available Unit Details

Offered reference	ABB 07EA61R1 GJV3074351R1
Identity check	Request the R1/GJV module marking and terminal labels, plus the installed channel-to-transmitter schedule.
Physical review	The item is the current-input module, without loop transmitters or their power source unless listed. ANAI settings, raw values, converted values and error response must be checked against the receiving application; no completed calibration is implied.
Included items	one analog current-input module; transmitters and loop-power equipment separately listed

Request available-unit photos and details: sales13@apterpower.com

Technical notes

Conversion context	The displayed EA/QA and selector codes belong to the ANAI software call for 07EA61. They are not additional hardware conversion bits.
Zero with context	Use raw EA and ERR with QA: a valid lower-end value and an open-circuit result must not be interpreted from QA alone.
Timing boundary	ANAI execution times depend on the receiving CPU; they are not the sampling rate or conversion time of this input module.

Alternative Names

ABB 07EA61R1 GJV3074351R1

Frequently Asked Questions (FAQ)

1. Why can QA be zero in two different situations with 07EA61R1 GJV3074351R1?

The normal ANAI converted range starts at zero, while the documented wire-break path also forces QA to zero. Compare raw EA and ERR: an open-circuit result uses EA <= 2 and ERR = 1. Do not create a plant alarm from QA = 0 alone.

2. Which ANAI setting can disable the expected wire-break monitoring on 07EA61R1 GJV3074351R1?

The monitoring described for the current-input path depends on U/I = 0. In voltage mode, U/I = 1, ERR remains zero for that monitoring function. Compare the retained call before attributing a missing alarm to failed hardware.

3. What should be compared if 07EA61R1 GJV3074351R1 receives the correct current but displays the wrong process magnitude?

Observe raw EA, converted QA and final engineering units in sequence. Verify the eight-bit selector, U/I setting and downstream scale; the fault can lie in conversion/application interpretation rather than in the measured current loop.

4. Why is the twelve-bit 07EA63 not a transparent replacement for 07EA61R1 GJV3074351R1?

The ANAI table gives 07EA61 a normal raw range of 8–255 and converted range of 0–4080; 07EA63 uses different coding and a different wire-break threshold. Review the block selection, scaling and alarms before approving migration.

5. Does ERR from the ANAI call for 07EA61R1 GJV3074351R1 directly prove the plant alarm operated?
No. ERR is a function-block result. During an authorized loop-fault test, trace that result through the actual application interlocks, indications and alarm handling; record the block result and plant response separately.

6. Can the ANAI execution time be used as the input sampling rate of 07EA61R1 GJV3074351R1?
No. The execution-time table refers to the function block on particular T200 CPUs. It does not specify this module's acquisition or conversion rate; do not use it to qualify a fast measurement requirement.

7. How should the normal raw and converted ranges be used when testing 07EA61R1 GJV3074351R1?
Apply approved current test points and observe both EA and QA before final scaling. The documented normal ranges are 8–255 and 0–4080; use the installation's approved tolerance and avoid deriving an unlisted absolute accuracy from those codes.

8. What must be checked after the wire-break test on 07EA61R1 GJV3074351R1 is complete?
Restore the valid loop and confirm raw and converted values recover, ERR returns to its valid operating state, and the application alarm/reset behavior follows the approved plant procedure. Retain channel identity and the before/after observations.

Downloads
The technical reference covers Procontic T200 analog acquisition. The independent field guide develops anai raw-value, conversion and wire-break diagnosis.

07EA61R1 GJV3074351R1 Original Technical Reference Excerpt	Selected original manufacturer pages for the applicable interfaces and technical data. PDF · 3 pages · 418.1 KB.
07EA61R1 GJV3074351R1 Installation & Commissioning Guide	ANAI Raw-Value, Conversion and Wire-Break Diagnosis. Follow the current loop through raw EA, converted QA and application alarm handling; use the 07EA61 eight-bit path rather than borrowing 07EA63 behavior. PDF · 2 pages · 92.6 KB.

Selected original technical pages and a separate installation guide support this product.

What happens after you enquire

Review your reference	Send the full marking, quantity and label photos. We review the item and any version details that need clarification.
Confirm the offer	Check the quoted reference, condition, included items and expected dispatch date before approving your order.
Arrange dispatch	Confirm delivery details and receive the tracking number when it becomes available.

Ordering checks
Include 07EA61R1 GJV3074351R1 and every revision or approval marking visible on the item. Keep the exact reference on your enquiry and quotation.

Request available label and interface photos. Have your maintenance team compare the offered 07EA61R1 GJV3074351R1 reference with the installed equipment and applicable ABB documentation.

Service and support

Dispatch Planning	Confirm stock and lead time with our team.
Dedicated Manager	Personalized one-to-one VIP service
ISO 9001:2015 Certified	Trusted quality management
Warranty Policy	Review the applicable warranty coverage and claim process.
Return Notice	Check the return process and obtain approval before sending an item back.
Shipping Method	Review shipping arrangements, transit estimates and delivery responsibilities.
Parts Availability	Browse stock listings and confirm current availability with our team.
How to order	See how to submit an enquiry, review a quotation and confirm an order.

Discuss your requirement
Send the full marking, label photos, quantity and required date. Our team will review the available sourcing options with you.

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Related product references
Separate supply references; listing does not establish interchangeability.

ABB YPH108B/SPC	Extended Speed Measuring Board; separate supply reference
ABB YPK113A	UART Communication Board; separate supply reference

Discuss 07EA61R1 GJV3074351R1 and the installed application with Apter Power.
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