ABB GJR5143100R0001 35EK90

Complete Product Information

ABB GJR5143100R0001 35EK90 is a Procontic T300 level coupler used at the basic subrack in a multi-subrack control arrangement.

01 Controller identity and configuration data

Device function	Level coupling
ABB system	Procontic T300
Coupler location	Basic subrack
Extension coupler	35 EK 91
Interconnection	35 SK 96
Illustrated subrack count	4 (planning example)
Illustrated end termination	Matching resistors at lower and upper ends
Subrack supervision	Separate from level coupler

02 Functional role and system position

ABB's T300 cabinet planning drawing places the 35 EK 90 at the lower connection of the basic subrack. In the depicted four-subrack arrangement, extension levels use 35 EK 91 couplers; this role difference matters when identifying a replacement location.

The connection drawing uses 35 SK 96 links between levels and shows matching resistors at the lower 35 EK 90 and upper 35 EK 91 ends. The installed number of levels and termination arrangement must be read from the approved cabinet design.

ABB states that the level couplers do not provide subrack supervision. Monitoring of processor and subrack operation is a separate system function; after an exchange, verify the coupling path and the independent supervision response using the site procedure.

03 Engineering highlights

Subrack position

35 EK 90 is shown at the basic subrack, not at an extension level.

Interconnection

35 SK 96 links connect the basic and extension-subrack couplers.

System boundary

Subrack supervision is implemented separately from the level coupler.

04 Evidence and applicability boundary

The planning drawings identify the 35 EK 90 device in the basic subrack. Electrical ratings for the GJR5143100R0001 order code are not stated in this source.

05 Control-chain integration map

Basic-subrack coupling

Use the 35 EK 90 position shown at the lower end of the T300 cabinet connection drawing.

Extension-subrack chain

Identify the 35 EK 91 couplers above the basic level and retain their original order.

Cabinet interconnection

Match the installed 35 SK 96 linking cables and connector positions to the approved drawing.

Service replacement

Record existing end termination and prove the restored coupling path and separate supervision.

06 Installation and protection controls

Record the full marking

Photograph GJR5143100R0001 35EK90 and its connector side before removal.

Map every subrack

Label the basic subrack and each extension level in the as-found cabinet.

Protect end termination

Retain the approved matching-resistor arrangement at the two ends of the coupling chain.

Inspect link cables

Check each 35 SK 96 connection and strain relief against the approved drawing.

Separate supervision checks

Do not treat coupler continuity as proof of subrack or processor monitoring.

Prove the restored system

Verify inter-subrack communication and independent supervision after the exchange.

07 Technical notes

Evidence scope	ABB planning data identify the 35 EK 90 device and topology; the complete GJR suffix must be checked on the available unit.
Topology	35 EK 90 belongs to the basic subrack; extension levels use 35 EK 91.
End termination	ABB shows matching resistors at the lower and upper ends of a four-subrack coupling path.
Monitoring	Level couplers do not themselves supervise the subracks.

08 Installed-system decision points

Why is GJR5143100R0001 35EK90 placed at the basic-subrack end?	ABB's T300 planning arrangement uses the 35 EK 90 at the basic level and 35 EK 91 at extension levels. Compare the cabinet drawing before assigning a replacement position.
How should the extension couplers be checked before replacing GJR5143100R0001 35EK90?	Map every 35 EK 91 unit and its order above the basic subrack, then compare the cable route with the approved layout.
What is the role of 35 SK 96 when checking GJR5143100R0001 35EK90?	It forms the illustrated link between levels. Record every installed cable and connector position before removal.

09 Configuration restoration and acceptance matrix

Application record	Restore only the approved application, addressing and configuration associated with the installed controller. Exact model: GJR5143100R0001 35EK90.
Hardware map	Reconcile rack position, companion modules and connector identities with the as-found record. Exact model: GJR5143100R0001 35EK90.
Startup diagnostics	Confirm initialization, communication and controller diagnostics before enabling automatic control. Exact model: GJR5143100R0001 35EK90.
Representative proof	Test representative configured functions against the recorded baseline. Exact model: GJR5143100R0001 35EK90.

10 Published technical data - continuation

Documented platform	ABB Procontic T300 multi-subrack system
Exact-model boundary	Use the complete marking and every visible revision or assembly identifier.
System-data boundary	The planning drawings identify the 35 EK 90 device in the basic subrack. Electrical ratings for the GJR5143100R0001 order code are not stated in this source.

11 Product-specific engineering FAQ

Why is GJR5143100R0001 35EK90 placed at the basic-subrack end?

ABB's T300 planning arrangement uses the 35 EK 90 at the basic level and 35 EK 91 at extension levels. Compare the cabinet drawing before assigning a replacement position.

How should the extension couplers be checked before replacing GJR5143100R0001 35EK90?

Map every 35 EK 91 unit and its order above the basic subrack, then compare the cable route with the approved layout.

What is the role of 35 SK 96 when checking GJR5143100R0001 35EK90?

It forms the illustrated link between levels. Record every installed cable and connector position before removal.

Does GJR5143100R0001 35EK90 provide subrack supervision?

No. ABB describes separate processor and subrack monitoring; prove that function independently after restoring coupling.

How should end termination be checked around GJR5143100R0001 35EK90?

Compare the installed matching-resistor positions with the approved cabinet drawing; the ABB four-level example places them at the lower and upper ends.

What should be photographed before removing GJR5143100R0001 35EK90?

Capture the complete marking, connector orientation, adjacent cable labels and basic-subrack position so the restored arrangement can be compared.

How can a failed inter-subrack link after installing GJR5143100R0001 35EK90 be isolated?

Check the lower coupler connector, 35 SK 96 links, extension couplers and end termination in order before changing controller settings.

What acceptance evidence should follow a GJR5143100R0001 35EK90 exchange?

Record the restored cabinet topology, link-cable identities, communication response and separate supervision result under the site procedure.

12 Lifecycle and supply boundary

The production and manufacturer-support phase of GJR5143100R0001 35EK90 is unconfirmed. It belongs to an installed Procontic T300 arrangement; replacement must retain the approved basic-subrack coupling design.

Offered reference	ABB GJR5143100R0001 35EK90
Included items	GJR5143100R0001 35EK90 level coupler; connecting cables, matching resistors and other accessories only when itemized
Identity check	Compare the complete marking, revision and connections with available unit photographs and the installed record.

13 Commissioning handover record

Application or settings identity	Retain with the complete model marking, installed asset reference and responsible acceptance sign-off.
Rack and companion map	Retain with the complete model marking, installed asset reference and responsible acceptance sign-off.
Startup diagnostic state	Retain with the complete model marking, installed asset reference and responsible acceptance sign-off.
Representative functional proof	Retain with the complete model marking, installed asset reference and responsible acceptance sign-off.

14 Enquiry workflow

Review your reference	Send the full GJR5143100R0001 35EK90 marking, cabinet layout, coupler photographs and required quantity.
Confirm the offer	Confirm the offered revision, connector condition, included parts and basic-subrack application in the quotation.
Arrange dispatch	Agree quantity, dispatch date and delivery details in the quotation.

15 Related product references

Recommended model	ABB BSFC-02C 3AXD50000011461
Recommended model	ABB CP-A RU 1SVR427071R0000
Recommended model	ABB GJR5146620R0001 35ZE94G
Recommended model	ABB 3BHE027867R0101
Recommended model	ABB NMFC03

Confirm the complete GJR5143100R0001 35EK90 marking, installed relationship and required quantity with Apter Power.

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