ABB TC513 3BSE006385R1

TECHNICAL REFERENCE / EXACT-MODEL ENGINEERING DOSSIER

ABB TC513 3BSE006385R1 is a af100 twisted-pair/coax converter modem identified for the ABB Advant Fieldbus 100 communication system. The complete order code, hardware execution and installed configuration must be matched together before replacement.

01 Product position

Complete identity	TC513 3BSE006385R1
Engineering role	AF100 Twisted-Pair/Coax Converter Modem
System context	ABB Advant Fieldbus 100 communication system
Evidence boundary	The ABB manual identifies the TC513 media-conversion role, 24 V interface and connector arrangement; the complete article number identifies the offered modem.

Decision snapshot

Identity control

Compare TC513 3BSE006385R1 with the installed label and the applicable ABB documentation.

Interface control

Photograph and label the carrier, terminals, cables and keying before removal.

Configuration control

Archive the applicable ABB Advant Fieldbus 100 communication system project or hardware settings before replacement.

Acceptance control

Use an approved functional test and retain the as-left diagnostic and acceptance evidence.

02 Verified technical data

The ABB manual identifies the TC513 media-conversion role, 24 V interface and connector arrangement; the complete article number identifies the offered modem.

Complete order code	TC513 3BSE006385R1
Equipment role	AF100 Twisted-Pair/Coax Converter Modem
System context	ABB Advant Fieldbus 100 communication system
Article number	3BSE006385R1
Module designation	TC513
Network role	AF100 twisted-pair/coax conversion
Bus media	Twisted-pair and coaxial cable
Power interface	24 V DC at X2
X1 and X2 connectors	2-pole jack screw-connectors
X3 connector	4-pole jack screw-connector
X4 coax connector	DIN 9-pole connector
Replacement boundary	Verify cable media, connectors and network position before substitution

Installed-system relationship

The complete TC513 3BSE006385R1 marking identifies the offered af100 twisted-pair/coax converter modem. Record the removed assembly label, its host position and the connected hardware before work starts so that the supplied item is compared with the actual installed boundary rather than with a shortened family name.

Within the ABB Advant Fieldbus 100 communication system, this item must be evaluated together with its carrier, terminals, cables and project configuration. Preserve the as-found interface map and revision information; a mechanically similar item is not automatically an electrical or software equivalent.

03 Integration and diagnostic logic

Installed-system replacement Compare the exact order code, host position and connected interfaces with the removed item.	**Planned maintenance** Capture the as-found label, status and configuration before disturbing the installation.
Controlled commissioning Restore documented connections and prove the intended signal, communication or control response.	**Spare qualification** Keep revision, configuration and acceptance evidence with the spare-part record.

Fault-isolation starting points

What configuration boundary matters when commissioning TC513 3BSE006385R1?	Use the approved ABB Advant Fieldbus 100 communication system project and the exact hardware or assembly revision. Do not treat physical fit as proof that the stored configuration and interface assignment are correct.
How can a suspected TC513 3BSE006385R1 fault be separated from field wiring or carrier faults?	Check supply and reference conditions first, then inspect the carrier, connectors and external wiring. Move to a controlled substitution only after the upstream and downstream paths have been documented.
What should be verified after fitting TC513 3BSE006385R1 to the installed system?	Confirm normal status indications, communication or signal continuity and the intended control response under an approved test state. Record the as-left state and compare it with the approved acceptance baseline.

04 Engineering questions and evidence

How should TC513 3BSE006385R1 be identified before a replacement is approved?	Compare every token in the complete marking, the installed position and the documented af100 twisted-pair/coax converter modem role. Confirm the TC513 3BSE006385R1 marking and the installed ABB Advant Fieldbus 100 communication system position.
What installed-system evidence should be retained before removing TC513 3BSE006385R1?	Record the slot or mounting position, connected interfaces, status indications and the current ABB Advant Fieldbus 100 communication system configuration. Photograph the complete label before disconnecting anything.
How should the interfaces for TC513 3BSE006385R1 be checked during installation?	Map each connected interface to the as-found record and the applicable manufacturer documentation. Keep connector, keying and terminal assignments consistent with the as-found record.
What configuration boundary matters when commissioning TC513 3BSE006385R1?	Use the approved ABB Advant Fieldbus 100 communication system project and the exact hardware or assembly revision. Do not treat physical fit as proof that the stored configuration and interface assignment are correct.
How can a suspected TC513 3BSE006385R1 fault be separated from field wiring or carrier faults?	Check supply and reference conditions first, then inspect the carrier, connectors and external wiring. Move to a controlled substitution only after the upstream and downstream paths have been documented.
What should be verified after fitting TC513 3BSE006385R1 to the installed system?	Confirm normal status indications, communication or signal continuity and the intended control response under an approved test state. Record the as-left state and compare it with the approved acceptance baseline.
Can TC513 3BSE006385R1 be replaced by a similar-looking assembly?	No direct equivalence is established by appearance. Compare the complete order code, revision, interface execution and system configuration before approving an alternative.
What handover record is appropriate after work on TC513 3BSE006385R1?	Retain the offered and removed markings, connection photographs, configuration record, diagnostic observations, functional test result and any unresolved exception.

Evidence and applicability

ABB Advant Fieldbus 100 User Manual 3BSE000506-600 and complete TC513 3BSE006385R1 marking. The ABB manual identifies the TC513 media-conversion role, 24 V interface and connector arrangement; the complete article number identifies the offered modem.

Acceptance evidence matrix

Complete marking	Record the offered and removed complete identities and revision evidence.
Physical interface	Retain carrier, connector, terminal and cable photographs.

Configuration	Archive the approved project, node, address or hardware-setting record as applicable.
Diagnostics	Save the initial and as-left status indications or diagnostic observations.
Functional proof	Record the approved test state, expected response and observed result.
Open exceptions	List unresolved interface, configuration or test exceptions before handover.

Technical notes

Evidence scope	The ABB manual identifies the TC513 media-conversion role, 24 V interface and connector arrangement; the complete article number identifies the offered modem.
Installation boundary	The exact installed carrier, terminals, cables and project configuration remain site-specific.
Technical reference	ABB Advant Fieldbus 100 User Manual 3BSE000506-600 and complete TC513 3BSE006385R1 marking

Discuss the complete marking with Apter Power
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Related product references

Catalogue navigation only; these references are not identified as substitutes or compatibility claims.

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