ABB CI520V1 3BSE012869R1

Advant Fieldbus Communication Interface

Controller Carrier and Dual-Media AF100 Review

Decide carrier/cable and media/modem relationships separately, then prove the redundant network paths without relying on a single healthy connection.

Before You Order

Controller side	Identify AC410 or AC450/460 and the receiving carrier/CPU arrangement.
Media side	List both media paths, modem types, cable identities and terminations.
Version boundary	Confirm the V1 requirement and the full 3BSE supply identity.

The installed relationship

Controller interface	AC450/460 + TK515, or AC410 + TK593 -> CI520V1 arrangement
Media path 1	X8 -> its external modem -> designated bus cable
Media path 2	X9 -> its external modem -> independent redundant cable

Interface specifications describe CI520/CI520V1 in the Advant Controller 400 architecture. Bus-length and termination conditions belong to the selected media/modem installation; keep the complete 3BSE order identity for supply.

Controller Carrier — work decisions

1 Identify the Advant controller

Record AC410 versus AC450/460 and the actual carrier/interface arrangement.

2 Trace both bus paths

Map X8 and X9 to the correct external modems and field media.

3 Match the controller cable

Retain TK593 or TK515 according to the controller installation rather than plug shape.

4 Preserve the service strap state

Confirm X12 remains unfitted for operation after fitting the V1 submodule.

5 Prove each configured route

Use the approved AF100 procedure to test the two media paths independently.

6 Accept network data

After media checks, confirm the intended cyclic application data and network diagnostic state.

Interpret the observed fault

Only one path works	Trace the failing modem, cable and termination without disturbing the healthy path unnecessarily.
Replacement has no redundant-media support	Recheck the V1 marking before changing network configuration.
Communication fails after a controller move	Compare TK515/TK593 selection and the receiving carrier arrangement.

Evidence required to release this assembly

Carrier proof	Controller position, submodule seating and cable type match the receiving arrangement.
Media proof	Both selected paths have their required modem and termination.
Redundancy proof	Each path sustains the approved communication test independently.

AF100 Installation Decisions

Version decision	V1 is material where redundant media is required.
Modem decision	Choose the external modem for the actual field medium.
Test decision	A working single cable is not the acceptance evidence for two-path service.

Decisions from the observed installation

The spare has the right family name but wrong version

Check redundant-media capability before installation.

The network recovers only with one cable

Investigate the separate physical path instead of declaring the interface fully accepted.

The evidence to retain for CI520V1 3BSE012869R1

Topology	Controller/carrier, X8/X9, modems, media and termination points.
Functional result	Per-path communication observations and final bus diagnostic state.

Technical basis

ABB Advant Fieldbus 100 User Manual 3BSE000506-600

Related product references

Separate supply references; listing does not establish interchangeability.

ABB SA610 3BHT300019R1	Control System Power Supply Module; separate supply reference
ABB 07EA61R1 GJV3074351R1	Isolated Analog Current Input Module; separate supply reference

Discuss CI520V1 3BSE012869R1 and the installed application with Apter Power.
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