General Electric DS200FSAAG1ABA

Installation & Commissioning | field workflow

Use this guide to prepare, fit, test and document the offered DS200FSAAG1ABA within its actual installed system.

Exact offered identity	DS200FSAAG1ABA
Engineering role	Field Supply Gate Amplifier Board
Installed-system reference	GE DC2000 drive field supply

Before work starts

GEI-100186 covers the DS200FSAAG1__ hardware group. Its group-level functions apply to this complete marking, while the ABA suffix and installed bridge assembly must be matched directly before exchange.

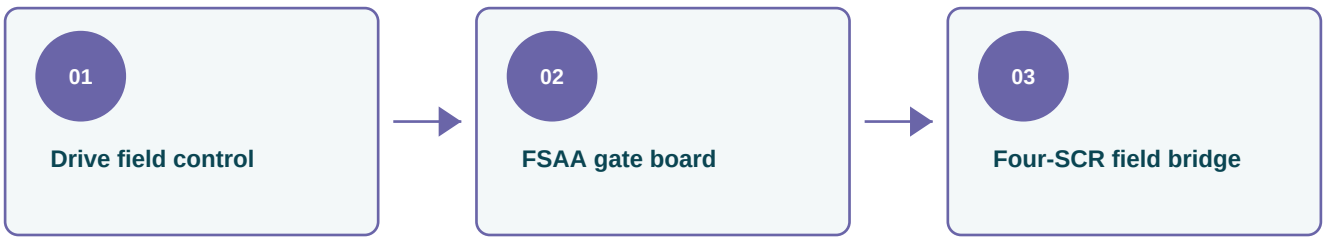
Record first

Send the complete DS200FSAAG1ABA marking, installed revision, quantity and system configuration with your enquiry.

Work package

Board family	DC2000 FSAA field supply gate amplifier
Hardware group	G1: non-reversing plugging (NRP), with conditional NRX capability
Bridge arrangement	Four-SCR full-wave field supply bridge
SCR control	all four SCRs are phase-controlled

Engineering path



02 Pre-installation readiness

STEP	ACTION	ACCEPTANCE
01	Make the field circuit safe	Apply the site lockout procedure to incoming power and the field supply. Verify stored energy is discharged before touching the board or bridge.
02	Control static discharge	Handle the printed board by its edges using grounded ESD protection; protect connectors and components during transport and insertion.
03	Match the complete board	Read the full DS200FSAAG1ABA edge marking and the installed bridge record. A G1 and G2 FSAA board have different SCR-control and MOV arrangements.
04	Check fusing before energizing	Inspect the L2/L3 30 A fuse positions and determine whether the field circuit needs larger external fuses under the original GE instructions.

Companion and host check

Confirm the board, fuses and the matching field-bridge/MOV assembly in the quotation; the drive, SCR bridge and external fuses are separate unless listed.

Review sequence



03 Fit and interface

Field bridge firing

Drive the four-SCR field-supply arrangement in the documented G1 mode; verify the firing leads and bridge terminals against the original wiring schedule.

Motor field excitation

Coordinate field current with the DC2000 drive controls and the motor field circuit during controlled start and stop tests.

Fuse-coordinated supply

Retain L2/L3 onboard fuse protection and establish whether the actual field rating requires external fuses for the field feed.

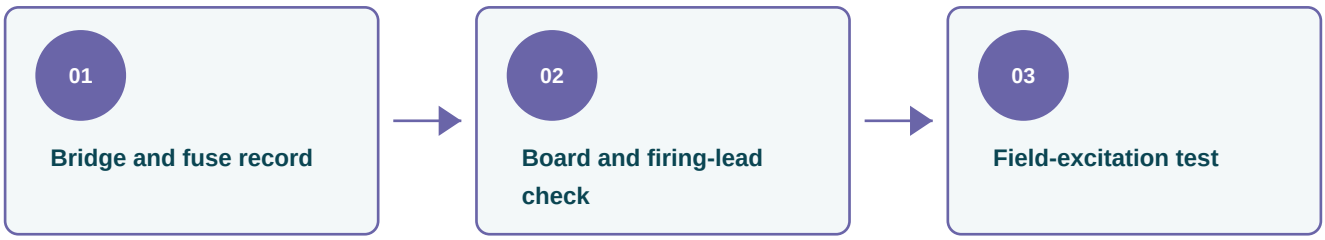
Replacement and fault review

Use complete board marking, bridge hardware, MOV placement and recorded wiring to investigate field loss, fuse operation or unstable excitation.

Field-supply relationship

The board is mounted on a four-SCR full-wave field bridge. In the G1 circuit, all four SCRs are phase-controlled. Keep the original bridge, firing leads and MOV arrangement with the installed drive configuration.

Review sequence



04 Commission and prove

STEP	ACTION	ACCEPTANCE
01	Preserve mode hardware	Record JP1–JP6 configuration positions. Do not transfer settings from a neighboring group or assume board appearance defines the operating mode.
02	Test controlled excitation	After wiring verification, prove field voltage/current response, relevant drive alarms and protective operation at a safe test point before normal operation.
03	Record the functional result	Verify isolation is removed deliberately, check bridge connections and fuse continuity, then observe controlled field excitation and drive protection indications under a site-approved test plan.

Protection and handling

L2/L3 input fuses are rated 30 A. The original instructions distinguish fields up to 24 A from larger applications that require external field fusing; isolate and discharge the equipment before board handling.

05 Handover and replacement record

When does the field-current arrangement of DS200FSAAG1ABA require external fuse review?	The board's L2/L3 onboard fuses are 30 A each. GE describes onboard protection for field loads up to 24 A; higher-current applications require external field fusing while the onboard fuses protect the MOV path. Verify the actual field load and cabinet fuse scheme against the drive drawing.

Can DS200FSAAG1ABA replace the other FSAA G group directly?	Do not treat the G1 and G2 groups as direct substitutes. Their SCR firing behavior, MOV placement and mode hardware differ; use the drive and bridge record to evaluate any proposed change.
Which marking should be recorded before fitting DS200FSAAG1ABA?	Record the complete DS200FSAAG1ABA edge marking, bridge identity, fuse data, connector positions and any mode hardware. Keep an as-found wiring record so the board can be returned to its original configuration.

Acceptance note

Log the fitted marking, firmware or board revision where present, wiring changes, test results and the approved plant configuration. GEI-100186 covers the DS200FSAAG1__ hardware group. Its group-level functions apply to this complete marking, while the ABA suffix and installed bridge assembly must be matched directly before exchange.

Discuss the complete model and fitted revision with Apter Power.
sales13@apterpower.com | +86 18030235313

Technical basis: GE Drive Systems FSAA Single-phase Field Supply Gate Amplifier Board Replacement Instructions, GEI-100186, October 1994

Other General Electric references

Catalog navigation only; confirm each complete model for its own installation.

General Electric DS200FSAAG1A	View product reference
General Electric DS200FSAAG2ABA	View product reference
General Electric 531X307LTBAKG1	View product reference