GE IS200EXHSG4A

Exciter High Speed Board

GE IS200EXHSG4A is the EX2100 simplex breaker-mode high-speed terminal board for field-breaker control, pilot-relay outputs, 70 V dc contact feedback, field flashing and de-excitation status conditioning.

01	02	03	04
G4 simplex breaker-mode EXHS configuration	41 close and 41T trip pilot-relay functions	53A and 53B field-flashing relay control	70 V dc wetted contact-status conditioning

System position

EX2100 EMIO control logic	EBKP backplane	IS200EXHSG4A pilot and status circuits	Field breaker, flashing and de-excitation equipment

Evidence boundary

Only verified exact-model facts and explicitly identified family context are included. Similar codes are not treated as substitutes.

Model-specific release focus

- G4 simplex breaker-mode EXHS configuration
- 41 close and 41T trip pilot-relay functions
- 53A and 53B field-flashing relay control
- 70 V dc wetted contact-status conditioning

02 / CAPABILITY MAP

Engineering domains and architecture

Control platform	GE EX2100 excitation control
Board acronym	EXHS
Board group	G4
Control redundancy	Simplex

Field-device mode	Breaker mode
Close relay function	41 close relay used
Trip relay function	41T trip relay used
Contact wetting supply	70 V dc from the EX2100 power-supply paths

Interface architecture

EBKP / EMIO

Cabled through the EBKP backplane for control commands and conditioned status

Field breaker

Pilot outputs for 41 close and 41T trip coils

Field flashing

Pilot-relay control for 53A and 53B contactors

EDEX status

Crowbar and de-excitation status conditioning returned to the control

Interface evidence for acceptance

- EBKP / EMIO: Cabled through the EBKP backplane for control commands and conditioned status
- Field breaker: Pilot outputs for 41 close and 41T trip coils
- Field flashing: Pilot-relay control for 53A and 53B contactors
- EDEX status: Crowbar and de-excitation status conditioning returned to the control

Use cases with controlled scope

Simplex field-breaker control

Operates the EX2100 breaker close and trip pilot functions in G4 applications.

Field flashing sequence

Controls 53A and 53B pilots during generator field build-up.

De-excitation coordination

Conditions breaker and EDEX status used during stored-energy discharge.

Exciter interlocking

Returns 41, 53A and 53B status to EMIO for sequence supervision.

INTEGRATION CHECKPOINTS

Identity

GE IS200EXHSG4A is preserved in full.

Host system

Rack, slot and surrounding hardware are verified.

Configuration

Project, firmware and settings are recorded.

Acceptance

Functional evidence is captured before release.

System relationship

EX2100 EMIO control logic	EBKP backplane	IS200EXHSG4A pilot and status circuits	Field breaker, flashing and de-excitation equipment

Configuration-control record

- Field-device mode: Breaker mode
- Close relay function: 41 close relay used
- Trip relay function: 41T trip relay used
- Contact wetting supply: 70 V dc from the EX2100 power-supply paths

Decision matrix

Question	Answer
Which EX2100 operating mode uses GE IS200EXHSG4A?	G4 is the simplex-control, field-breaker version of the EXHS board.
Does GE IS200EXHSG4A include the 41T trip function?	Yes. The G4 breaker-mode configuration uses both the 41T trip relay and the 41 close relay.
How does GE IS200EXHSG4A communicate with EMIO?	Its command and conditioned-status circuits cable to EMIO through the EBKP backplane.
Which flashing devices are controlled by GE IS200EXHSG4A?	The board provides pilot-relay control for the 53A and 53B field-flashing contactors.

Eight release precautions

1

Use GE IS200EXHSG4A only in the documented G4 simplex breaker-mode circuit.

2

Isolate the station battery, breaker control supply and exciter field circuit before handling the board.

3

Verify the complete IS200EXHSG4A suffix against the installed nameplate and controlled drawing.

4

Label the 41 close, 41T trip, 53A, 53B and KDEP circuits before disconnecting wiring.

5

Confirm both 70 V dc wetting-supply paths and their returns before applying control power.

6

Check EBKP and EMIO cabling for keyed orientation, pin damage and secure seating.

7

Do not test field flashing with the generator field connected unless the approved startup procedure permits it.

8

Prove breaker close, breaker trip, flashing status and de-excitation response before releasing the exciter.

Commissioning decision points

- Confirm both 70 V dc wetting-supply paths and their returns before applying control power.
- Check EBKP and EMIO cabling for keyed orientation, pin damage and secure seating.
- Do not test field flashing with the generator field connected unless the approved startup procedure permits it.
- Prove breaker close, breaker trip, flashing status and de-excitation response before releasing the exciter.

Product verification and support

Apter Power verification record

Model identity	Keep the complete GE model code and every suffix in purchasing, installation and acceptance records.
Verification boundary	Confirm the physical nameplate, installed position and revision-controlled project documents before field work.
Apter Power support	Use the contact details and Apter Power website links in this document for product and sourcing support.

Related Apter Power references	Scope note
GE IS200TDBTH2ACD	Portfolio reference only; verify compatibility independently.
GE IS200TREAH1A	Portfolio reference only; verify compatibility independently.
GE IS200TRTDH1CCC	Portfolio reference only; verify compatibility independently.

Apter Power technical and sourcing support
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Scan for the Apter Power contact page.

Model record GE IS200EXHSG4A Exciter High Speed Board Verify the complete nameplate before installation.

Handover evidence to retain

- Exact identity retained: GE IS200EXHSG4A
- EBKP backplane
- IS200EXHSG4A pilot and status circuits
- Archive as-left checks and measured results before release.