GE IS200EDCFG1AED

Exciter DC Feedback Board

DC Shunt, Bridge Scaling and Optical Channel Proof

Treat the bridge voltage ratio and DC shunt relationship as two independent acceptance decisions before reconnecting the receiving controller.

Before You Order

Measurement identity	Confirm DC field-feedback duty rather than AC supply measurement.
Bridge configuration	Obtain the voltage-selector record and approved shunt specification for the installed excitation system.
Interfaces	Request photographs of the optical, shunt, voltage and supply connection areas.

The installed relationship

Current route	DC shunt -> differential amplifier -> frequency conversion -> current fiber
Voltage route	Bridge output -> selected scaling network -> frequency conversion -> voltage fiber
Receiving boundary	Two isolated optical signals -> assigned EISB feedback channels

Values describe the EDCF measurement path in the documented EX2100 design. The 100 mV figure is the nominal shunt signal, not a maximum input rating. Preserve the full G1AED hardware identity and installed voltage-scaling selection.

DC Shunt, Bridge Scaling — work decisions

1 Identify hazardous measurement points

Establish the approved bridge/shunt isolation and record current and voltage connection duties.

2 Capture the voltage selection

Record the fitted selector setting before board removal; do not infer it from cabinet voltage alone.

3 Preserve shunt polarity

Restore the recorded shunt connections and their measurement reference without changing the shunt rating.

4 Trace the two optical destinations

Label field-current and bridge-voltage routes through to their assigned EISB receivers.

5 Compare independent quantities

Use approved references to assess current sign/magnitude and bridge voltage separately.

6 Retain the final scaling evidence

Record selector, shunt and receiving configuration with both accepted measurement results.

Interpret the observed fault

Only voltage scale is wrong	Investigate the bridge selection and receiving scale while retaining the independent current channel.
Current sign is reversed	Reconcile differential shunt polarity with the circuit drawing.
Both channels lost	Check the common supply and optical-interface path before replacing the shunt.

Evidence required to release this assembly

Ratio proof	Bridge voltage matches the approved reference under the recorded selector setting.
Polarity proof	Field-current indication agrees with the shunt connection and reference direction.
Channel proof	Each fiber reaches its intended EISB measurement input.

Interpreting the Measurement Chain

Nominal shunt value	A nominal signal is not a maximum rating; retain the approved shunt specification.
Frequency encoding	A received pulse stream still requires the correct engineering scale.
Supply boundary	Check both bipolar rails separately from the hazardous measured circuit.

Decisions from the observed installation

Voltage is plausible but not proportional to the reference

Review the selected bridge ratio before changing the controller calibration.

One optical lead was exchanged during maintenance

Rebuild the current/voltage destination map and prove each quantity independently.

The evidence to retain for IS200EDCFG1AED

As-found evidence	Selector position, shunt leads, optical destinations and full board marking.
As-left evidence	Current, voltage, operating state, reference instrument and accepted deviation.

Technical basis

GE EX2100 Excitation Control User Guide GEH-6632G

Related product references

Separate supply references; listing does not establish interchangeability.

GE IS200EISBH1AAB	Exciter ISBus Communication Board; separate supply reference
GE IS200EPSMG1AED	Exciter Power Supply Module; separate supply reference



Discuss IS200EDCFG1AED and the installed application with Apter Power.
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