General Electric 750-P5-G5-S5-HI-A1-R-E

Installation & Commissioning | field workflow

Use this guide to prepare, fit, test and document the offered 750-P5-G5-S5-HI-A1-R-E within its actual installed system.

Exact offered identity	750-P5-G5-S5-HI-A1-R-E
Engineering role	Feeder Management Relay
Installed-system reference	GE Multilin 750/760 feeder protection

Before work starts

The order-code options are verified for this complete relay. Protection setpoints, fitted firmware and wiring must be taken from the installed relay record; the 760 autoreclose function is a separate product family.

Record first

Send the complete 750-P5-G5-S5-HI-A1-R-E marking, installed revision, quantity and system configuration with your enquiry.

Work package

Relay family	750 feeder management
Phase CT inputs	P5: 5 A
Zero-sequence CT input	G5: 5 A
Sensitive-ground CT input	S5: 5 A

Engineering path



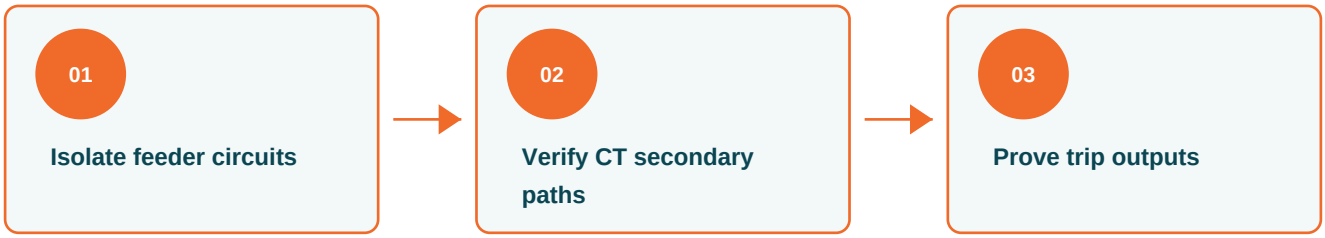
02 Pre-installation readiness

STEP	ACTION	ACCEPTANCE
01	Control CT secondaries	Follow the site CT isolation and shorting procedure before opening current circuits. Confirm phase, zero-sequence and sensitive-ground inputs are landed on the intended terminals.
02	Match the auxiliary supply	Verify the available control voltage and frequency fall inside the HI option range before energizing the relay; do not infer the supply from another 750 relay in the cubicle.
03	Save the setting record	Export settings and record firmware, CT ratios, breaker logic, protection elements and event settings before replacement. Review differences before importing an archived file.
04	Prove analog scaling	Test every assigned 0–1 mA output at meaningful low, mid and high indications, checking receiver scaling, polarity and channel mapping.

Companion and host check

Confirm the relay unit, terminal blocks, firmware revision and any supplied accessories in the quotation; CTs, wiring and the feeder circuit are separate.

Review sequence



03 Fit and interface

Phase-current protection

Apply the three 5 A phase inputs to the feeder CT set, then commission pickup, delay and restraint settings against the protection study.

Ground-fault supervision

Use the separate 5 A zero-sequence and sensitive-ground inputs only with the corresponding CT circuits and approved grounding scheme.

Analog plant reporting

Map the eight 0-1 mA channels to meters, recorders or control inputs with documented engineering units and receiver ranges. Use the 0-1 mA output scaling expected by the installed recorder or RTU; a 4-20 mA receiver is not an equivalent load.

Local operating review

Use the enhanced LCD and breaker-closed indicator for on-site status review, while proving the breaker indication against the actual auxiliary contact wiring.

Installation relationship

Connect the P5, G5 and S5 current inputs to their corresponding 5 A CT circuits. Match the HI control supply to the available source and validate the trip/close wiring before energizing.

Review sequence



04 Commission and prove

STEP	ACTION	ACCEPTANCE
01	Check trip circuits	Place the breaker in the approved maintenance state; test alarm and trip outputs through the site protection procedure before release.
02	Verify panel indication	Compare the red breaker-closed LED and enhanced-display status with actual breaker contacts and control-system indications after commissioning.
03	Record the functional result	Verify the three CT input groups, HI supply, breaker indication, assigned protection trips and all used 0–1 mA analog outputs. Record as-found and as-left values under the site's protection-test procedure.

Analog interface

The A1 option supplies eight 0-1 mA analog outputs. Configure each receiver for the selected channel range and verify end-to-end scaling against the feeder engineering record.

05 Handover and replacement record

How can the breaker-closed indication on 750-P5-G5-S5-HI-A1-R-E be proved against the field circuit?	Operate the breaker in an approved test state and compare the red indicator with the actual auxiliary contact, relay input logic and control-system indication. The indicator color alone does not establish contact polarity or prove a correctly wired status circuit.
How should settings be moved into 750-P5-G5-S5-HI-A1-R-E?	Record the original relay firmware and export its setting file. Compare CT ratios, element enables, time curves, I/O mappings and software compatibility before loading, then test the affected protection functions.
What should be verified at the front panel when replacing 750-P5-G5-S5-HI-A1-R-E?	Confirm that the installed unit has the E enhanced display and that its navigation, displayed measurements, alarms and breaker status agree with the commissioned relay configuration. The display is an identity and operating check; the full order code and fitted firmware still govern replacement review.

Acceptance note

Log the fitted marking, firmware or board revision where present, wiring changes, test results and the approved plant configuration. The order-code options are verified for this complete relay. Protection setpoints, fitted firmware and wiring must be taken from the installed relay record; the 760 autoreclose function is a separate product family.

Discuss the complete model and fitted revision with Apter Power.
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Technical basis: GE Multilin 750/760 Firmware 6.00 Release Details, GER-4012; 750/760 Feeder Management Relay brochure

Other General Electric references

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

General Electric 750-P5-G5-S5-HI-A20-R-E	View product reference
General Electric 369-HI-R-0-0-0-0-E	View product reference
General Electric IC754VGI06STD	View product reference