General Electric IS215VPROH1BE

Engineering Installation and Acceptance Guide

Installed work boundary

Do not confuse the IS215 assembly reference with a claim that a complete three-channel protection module or all terminal boards are included.

Dedicated protection inputs	Independent VPRO channels	TREG trip outputs

01 Protection-system definition

Decision / observation	Action and acceptance evidence
Itemize the assembly	Record the actual VPRO population and associated TPRO/TREG boards. System capacity is not evidence that every protection component is included with the offered reference.
Confirm the H1B trip boundary	Trace the J4 second-TREG path where installed. The lower-power H2B arrangement omits that path and must not be accepted by enclosure resemblance.
Preserve independent supplies	Identify the protection-channel power and IONet arrangements separately from the main turbine controller. Use the authorized protection outage procedure.

02 Sensing and logic verification

Decision / observation	Action and acceptance evidence
Check dedicated pickup signals	Retain pickup waveform, channel assignment and configured speed interpretation. Electrical frequency limits are not approved turbine trip settings.
Accept other configured inputs	Test PT, thermocouple and analog functions actually used by the application using their own interface conditions. A speed test does not prove those inputs.
Preserve protection configuration	Retain the approved voting arrangement, turbine setpoints and physical trip-output schedule. Do not derive operating settings from generic board specifications.

03 Quantitative acceptance context

Decision / observation	Action and acceptance evidence
Supply window	The 125 V DC nominal supply has a documented 70-145 V DC input range. Verify the actual protection supply and polarity without treating nominal voltage as a substitute for the permitted input window.

03 Quantitative acceptance context - continued

Decision / observation	Action and acceptance evidence
Speed-input range	The 2 Hz-20 kHz frequency span defines the pickup interface. Turbine rpm conversion depends on the actual target/pickup relationship and approved configuration.
Per-channel versus module count	Three passive speed inputs per VPRO do not imply that three VPRO channels are included in the offered assembly. Record actual population separately from architectural capacity.
PT acceptance context	Two PT inputs per VPRO use a nominal 115 V rms interface; the stated synchronizing frequency span is 45-66 Hz. Retain electrical input proof separately from speed and trip tests.

04 Trip hardware evidence and fault separation

Decision / observation	Action and acceptance evidence
Second-TREG power absent	Record actual J4 board population, configured second-trip group, feed voltage and cable identity. An uninstalled second TREG requested by configuration is a different cause from a failed feeder.
Contact/command mismatch	Retain requested relay state, feedback contact state and final solenoid voltage. Trace the named terminal-board/cable path before interpreting software command as successful physical trip.
Enabled speed/watchdog logic	Record enable settings and the changing input source for stale-speed, speed-difference and control-watchdog functions. Preserve the actual frame-rate context and approved reset conditions with the test result.

Technical basis

GE Mark VI System Guide GEH-6421H, Volume I; GEH-6421M, Volume II

Related platform references - separate selection review

General Electric IS200TBAIH1CDD	Analog Input/Output Terminal Board
General Electric IS200VAICH1DBC	Analog Input/Output Processor Board

Engineering contact

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