General Electric IS200VRTDH1DAC

Engineering Installation and Acceptance Guide

Installed work boundary

This processor selects curve, gain and line-frequency rejection. It must be matched to the physical detector, not to a generic temperature-input label.

RTD termination	Curve + compensation	Controller temperature

01 Temperature conversion plan

Decision / observation	Action and acceptance evidence
Capture the linearizations	Save each sensor material, nominal resistance and selected curve. Separate the temperature unit from the actual resistance-to-temperature characteristic.
Establish scan architecture	Record normal/fast selection and whether the installation is simplex or TMR. The fast provision is not applicable to TMR operation.
Check field compensation	Retain the three-wire terminal allocation and lead-resistance evidence. A processor exchange should not silently alter the sensor wiring method.

02 Processor restoration and proof

Decision / observation	Action and acceptance evidence
Restore the termination paths	Compare the connected TRTD/DRTD interface and channel allocation with the saved rack configuration before evaluating temperatures.
Inject characteristic-specific points	Use an approved RTD simulator at representative resistances. Record injected resistance and converted temperature together so a wrong curve can be identified.
Observe timing and indicators	Compare channel refresh with the configured mode and review RUN/FAIL/STATUS together with channel diagnostics. A healthy processor state does not prove every field measurement.

03 Quantitative acceptance context

Decision / observation	Action and acceptance evidence
Normal scan calculation	A 250 ms scan corresponds to four scans per second. Compare the displayed temperature behavior with this acquisition context before attributing every delayed display update to sensor response.

03 Quantitative acceptance context - continued

Decision / observation	Action and acceptance evidence
Fast scan calculation	A 40 ms provision corresponds to 25 scans per second. Its non-TMR restriction remains part of the selection; the reciprocal calculation does not widen architecture applicability.
Electrical span boundary	The 0.3532-4.054 V electrical span is not a universal sensor temperature range. Resistance conversion still requires the selected RTD characteristic.
Lead compensation boundary	Three-wire compensation operates within the documented lead conditions. Retain the 15 ohm maximum two-way resistance evidence rather than assuming compensation removes every cable effect.

04 Group-dependent recovery decisions

Decision / observation	Action and acceptance evidence
Gain-region proof	If Gain 2.0 is selected, retain the tested resistance range below 190 ohms and the actual sensor curve. A gain test outside that condition cannot establish the intended accuracy benefit.
Group A/B comparison	Record both eight-input rate/filter/gain configurations. If an apparent delay affects only one group, compare identical simulator steps before replacing the shared processor.
Reinstatement closeout	After clearing the sensor fault, log whether recovery is automatic or manual and the elapsed recovery interval. Distinguish a channel still removed from scan from a latched system-limit signal.

Technical basis

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

Related platform references - separate selection review

General Electric IS200TSVOH1BDC	Servo Valve Terminal Board
General Electric IS200VSVOH1BEF	Servo Control Processor Board

Engineering contact

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