General Electric IS200TBAIH1CDD

Engineering Installation and Acceptance Guide

Installed work boundary

One terminal group occupies one processor-cable destination; a full VAIC allocation uses two groups with separately configured channel ranges.

Field analog loops	TBAI H1C	VAIC H1D+

01 Generation and field-loop preparation

Decision / observation	Action and acceptance evidence
Identify the matched pair	Read the VAIC generation at the rack and the H1C termination identity. Retain both in the job record; the later 20 mA load allowance requires the documented pair.
Allocate the ten inputs	List the transmitter type and selected current/voltage range at each terminal. Photograph the original selections so field wiring and configuration can be reconciled after transfer.
Separate the two output roles	Identify whether output 1 uses its 20 mA or 200 mA provision. Output 2 is the 20 mA path; do not transfer a high-current load between them based on terminal proximity.

02 Termination restoration and signal proof

Decision / observation	Action and acceptance evidence
Restore processor destinations	Mark JR1, JS1 and JT1 before disconnection. Restore the simplex JR1 path or the installed three-processor allocation without interchanging cable destinations.
Establish output compliance	Include cable resistance and receiver load in the loop calculation. Use the rating of the actual VAIC/TBAI generation, with the specified cabling conditions retained.
Exercise the selected circuits	With machine outputs controlled by the approved procedure, compare field input, controller indication and output command/current as separate tests. Record test point and selected range.

03 Quantitative acceptance context

Decision / observation	Action and acceptance evidence
20 mA load example	At 20 mA, an 800 ohm receiver requires 16 V across that load alone. Include cable drop separately and retain the documented later-generation pairing; the calculation is not a new compliance-voltage rating.

03 Quantitative acceptance context - continued

Decision / observation	Action and acceptance evidence
Earlier-generation comparison	At 20 mA, a 500 ohm load drops 10 V. The 500/800 ohm distinction illustrates why an earlier VAIC/TBAI combination cannot inherit the later load allowance.
Higher-current output	At 200 mA, a 50 ohm load drops 10 V. Confirm the output-1 selection and actual receiver before using the higher-current range.
Field capacity versus rack capacity	One TBAI terminates ten inputs and two outputs; two terminations form the twenty-input/four-output VAIC field arrangement. Keep this allocation explicit when a whole channel group is unavailable.

04 Loop-specific diagnostic record

Decision / observation	Action and acceptance evidence
ID/location alarm	Record the named processor and connector, the terminal type/revision and the cable label. Correct a location mismatch before using a transmitter calibration to explain a missing channel.
Supply branch versus signal branch	With the field circuit isolated as required, check whether the transmitter branch is shorted or overloading its protected supply. Retain the receiver/output-current test separately; the 21 mA transmitter branch is not the 200 mA output path.
Loaded output evidence	At each commanded point retain receiver current, receiver resistance and wire-drop estimate. Note whether the loop was connected to the first selectable output or the second 20 mA output so the result remains reproducible.

Technical basis

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

Related platform references - separate selection review

General Electric IS200VAICH1DBC	Analog Input/Output Processor Board
General Electric IS200TRTDH1CC	Resistance Temperature Detector Terminal Board

Engineering contact

Discuss the complete unit and installed application with Apter Power.
sales13@apterpower.com | +86 18030235313