General Electric IS200TSVOH1BDC

Engineering Installation and Acceptance Guide

Installed work boundary

Select coil jumpers from both resistance and current requirements; keep sensor excitation and trip-clamp circuits identified separately.

VSVO processor	TSVO field interface	Valve + LVDT

01 Actuator-side preparation

Decision / observation	Action and acceptance evidence
Control machine movement	Establish the authorized actuator isolation and test limits before touching coil or feedback wiring. Keep the actual valve travel and shutdown procedure in the work package.
Record coil selection	Capture both servo circuit assignments and selected coil-current provision. Identify output range and valve coil before lifting conductors.
Separate LVDT windings	Label excitation and feedback pairs by function, not color alone. Retain winding polarity and the VSVO channel associated with each actuator.

02 Field-loop restoration

Decision / observation	Action and acceptance evidence
Restore the terminal schedule	Return each coil and LVDT group to its recorded terminals, then compare both TSVO channel assignments with the rack configuration.
Verify feedback direction	With authorized controlled motion, compare command direction and measured movement. Excitation amplitude alone does not prove correct winding polarity.
Retain the trip clamp	Where the installation uses TREG-to-TSVO JD1, restore the documented cable and its protective action. Never bridge it to obtain a normal positioning test.

03 Coil and excitation acceptance calculations

Decision / observation	Action and acceptance evidence
40 mA coil alternatives	The standard simplex 62 ohm coil has a nominal I x R drop of 2.48 V; the TMR 89 ohm coil gives 3.56 V. These are winding-only calculations, not output-compliance ratings or a permission to change jumpers without the complete selection table.

03 Coil and excitation acceptance calculations - continued

Decision / observation	Action and acceptance evidence
120 mA selection alternatives	At nominal current the 40 ohm simplex winding gives 4.8 V and the 75 ohm TMR winding gives 9.0 V. Retain internal-selection resistance and field-wire effects in the actual drive review.
Excitation test window	The stated 7.00 +/-0.14 V RMS means 6.86-7.14 V RMS; 3.2 +/-0.2 kHz means 3.0-3.4 kHz. Measure under the intended sensor loading and preserve RMS notation.
Feedback route record	Record distance and measured two-way resistance together. A 250 m route does not pass simply by being below 300 m if its lead/connection resistance exceeds the 15 ohm condition.

04 Independent acceptance paths

Decision / observation	Action and acceptance evidence
Tracking failure	Compare coil selection, feedback polarity and field continuity before changing servo control settings. Separate a terminal error from a processor command fault.
Output stays disabled	Find the trip cause and applicable reset conditions before restoring the output. Do not force energization around the clamp or shorting function.
Release record	Record normal positioning, feedback interpretation and shutdown behavior as different results, retaining the exact termination and installed actuator identities.

Technical basis

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

Related platform references - separate selection review

General Electric IS200VSVOH1BEF	Servo Control Processor Board
General Electric IS200TVIBH2BCC	Vibration Input Terminal Board

Engineering contact

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