General Electric IS200TVIBH2BCC

Complete Product Information

Product role

This Mark VI vibration termination interfaces machine transducers with a VVIB processor. The correct sensor class and channel configuration determine whether the path measures vibration, position or phase; the terminal board itself does not perform the processor conversion.

Published product summary

Summary field	Published information
Product type	Vibration Input Terminal Board
Manufacturer part number	IS200TVIBH2BCC
Shipping	Swift global dispatch
Condition	New, original product
Shipping size (est.)	33cm x 17.7cm x 4cm
Country of Origin	USA

Native product information

Product field	Published information
Manufacturer	General Electric
Product Category	Gas Turbine Control
Spare Part Number	IS200TVIBH2BCC

Native product information - continued

Product field	Published information
Weight	0.58 kg
Tariff Code	8537101190

Overview

General Electric IS200TVIBH2BCC routes different machine-transducer signals into the VVIB measurement chain; displacement, velocity and DC position require different test stimuli and units.

Measurement classes	Keep AC vibration amplitude separate from DC position.
Channel pairing	An X/Y pair can raise a fault when either member exceeds its limit.
Phase reference	Phase acceptance requires the configured once-per-revolution reference.

Selection and adjacent choices

IS200TVIBH2BCC is the TVIB field termination in a Mark VI VVIB measurement chain. Its H2B CC identity must be retained with the installed transducer and cable allocation. Dynamic vibration processing occurs in VVIB; the terminal-board identity alone does not establish sensor sensitivity, machine alarm values or every physical connector option.

Operating relationship

Different measurement classes require different amplitude conventions: proximity displacement is expressed in peak-to-peak voltage, seismic velocity in peak voltage, and static position in DC voltage. An amplitude accepted in one convention can be wrong in another. Preserve the transducer sensitivity and unit conversion before judging an apparent change in vibration.

Integration implications

The chain checks electrical input limits separately from configured system limits. Position functions use the DC component for applications such as thrust wear or differential expansion; phase uses the 1X component relative to the key-slot reference. Static, dynamic and phase acceptance must therefore remain separate records even when they originate in the same terminal assembly.

Technical parameters

Parameter	Value / condition
Transducer supply	-24 V DC, current limited
Transducer supply limit	12 mA per transducer
Proximity displacement span	0-4.5 V peak-to-peak
Proximity accuracy, 5-200 Hz	+/-0.030 V peak-to-peak
Proximity accuracy, 200-500 Hz	+/-0.150 V peak-to-peak
Seismic velocity input span	0-2.25 V peak
Integrated-acceleration tracking band	10-233 Hz
Static position input span	-0.5 to -20 V DC
Static position accuracy	+/-0.2 V
Phase span	0-360 degrees
Conditional 1X phase accuracy	+/-2 degrees up to 14,000 rpm
Integrated velocity span	0-2.25 V peak
Integrated velocity accuracy	+/-0.015 V peak, 10-233 Hz

Parameter applicability

Shared TVIB/VVIB measurement-path values apply by transducer class and frequency condition. The offered H2B CC execution retains its own connector/wiring identity; channel supply and scaling must match the installed transducers.

System and supply context

TVIB terminates the configured vibration and position transducers; VVIB supplies measurement processing and transfer to the Mark VI controller.

Integration boundary

The applicable figures are shared TVIB/VVIB measurement-path values for the configured sensor class, not universal performance claims for every H2B connector implementation.

Applications / Compatibility

Shaft-relative vibration

Use the proximity displacement conversion with the actual probe sensitivity and amplitude convention.

Housing-velocity surveillance

Retain the seismic/velocity signal class and its frequency-conditioned accuracy instead of applying displacement scaling.

Thrust or expansion position

Evaluate the DC component with the approved target/zero relationship, independently of the AC vibration channel.

Synchronous phase assessment

Compare the 1X measurement with a valid once-per-revolution reference before accepting phase angle.

Precautions scope

Retain the transducer class and measurement convention before injecting vibration, position or phase stimuli.

Installation precautions

Engineering field	Interpretation / condition
Trace each transducer class	Record probe type, sensitivity and intended units before disturbing TVIB field wiring.
Check negative probe power	Confirm the intended -24 V supply polarity and sensor load; a conventional positive-voltage transmitter is not automatically compatible.
Distinguish peak and peak-to-peak	Set the test instrument and injected waveform convention to the measurement class used by the channel.
Use band-appropriate accuracy	Apply the correct frequency band when comparing injected proximity or velocity amplitude with the controller value.
Retain both X/Y channels	Test each probe independently because either member of the pair can initiate a configured limit condition.
Separate position from phase proof	Use DC points for position and a synchronized dynamic/reference stimulus for phase; neither test substitutes for the other.

Lifecycle and replacement

Engineering field	Interpretation / condition
Offered revision status	The manufacturing phase of IS200TVIBH2BCC is unconfirmed; H2B CC remains the controlling offered identity.
Service relationship	A TVIB exchange retains the termination role; VVIB configuration and the installed transducer chain determine the measurement behavior.
Replacement consequence	Changing transducer principle or terminal execution requires renewed unit scaling, supply and connector review rather than a name-only substitution.

Available Unit Details

Engineering field	Interpretation / condition
Terminal-board identity	The offered assembly is IS200TVIBH2BCC, the H2B TVIB field interface with CC revision.
Measurement companions	VVIB processing and the machine transducers are external to this terminal-board function; their channel assignment is installation-specific.
User shipping values	The supplied transport estimate is 33cm x 17.7cm x 4cm at 0.58 kg, independently of the machine transducer layout.

Alternative Names

Variant	Complete-model spelling
1	GE IS200TVIBH2BCC
2	General Electric IS200TVIBH2BCC

Technical notes

Engineering field	Interpretation / condition
Velocity uncertainty	For the shared seismic/velocity path, use the greater of 2% of reading or 0.008 V peak in the 5-200 Hz band; the percentage term changes to 5% at 200-500 Hz.

Technical notes - continued

Engineering field	Interpretation / condition
Integration boundary	The accelerometer-derived velocity tracking band is not the same as the proximity displacement band; keep the configured processing class with the test record.
Position diagnostics	A static-position electrical limit must be distinguished from a configured thrust/expansion operating limit before the sensor zero is adjusted.

Technical questions

Full-model question	Engineering answer
Why can a sine-wave test on IS200TVIBH2BCC appear wrong by a factor of two?	Check whether the instrument reports peak or peak-to-peak amplitude and whether the configured channel is velocity or displacement. Convert the source convention before investigating hardware gain.
What should be checked if only one member of an X/Y pair through IS200TVIBH2BCC reaches a limit?	Review the two channel inputs and their limit states separately. The chain can report a pair fault when either member exceeds its limit; a normal companion reading does not invalidate that diagnostic.
Can a valid DC position reading prove vibration measurement through IS200TVIBH2BCC?	DC position uses the static component, whereas vibration uses dynamic amplitude and frequency processing. Apply a separate in-band AC stimulus and preserve the sensor scaling before accepting vibration performance.
Why can the error allowance for IS200TVIBH2BCC increase above 200 Hz?	The shared measurement specifications use different accuracy bands. Compare the actual test frequency with the applicable proximity or seismic band instead of applying the low-frequency allowance across the complete spectrum.
How can low-amplitude velocity readings through IS200TVIBH2BCC be assessed?	Use the specified absolute floor as well as the percentage term when calculating the acceptance allowance. A percentage-only calculation overstates precision close to zero.
What is required to test phase through IS200TVIBH2BCC near its stated speed limit?	Use the configured 1X vibration component and valid key-slot reference under the documented conditions. A free-running signal without that reference cannot prove the stated phase accuracy.
Why should a position-limit fault through IS200TVIBH2BCC not be cleared by re-zeroing immediately?	Record the raw DC input, electrical diagnostic and configured operating limit first. Re-zeroing can conceal a real target movement or wiring problem without repairing its cause.

Technical questions - continued

Full-model question	Engineering answer
Can all transducers connected to IS200TVIBH2BCC use the same current allowance?	Check the intended sensor supply and each transducer demand against the current-limited chain. A probe power fault is different from an amplitude-range fault and needs a supply/load test before calibration is changed.

Downloads

Document	Content and format
Technical reference	Original GEH-6421H system-architecture pages for the VVIB/TVIB measurement architecture. PDF, 2 pages.
Engineering guide	Apter Power field guide: amplitude conventions, frequency-conditioned accuracy and X/Y diagnostics. PDF, 2 pages.

What happens after you enquire

Engineering field	Interpretation / condition
1 Review your reference	Send the full marking, quantity and label photos. We review the item and any version details that need clarification.
2 Confirm the offer	Check the quoted reference, condition, included items and expected dispatch date before approving your order.
3 Arrange dispatch	Confirm delivery details and receive the tracking number when it becomes available.

Ordering checks

Engineering field	Interpretation / condition
Match the complete marking	Include IS200TVIBH2BCC and every hardware or assembly-revision marking visible on the item. Keep the exact reference on your enquiry and quotation.
Check the offered item before ordering	Request available label and interface photos. Have your maintenance team compare the offered IS200TVIBH2BCC reference with the installed equipment and applicable General Electric documentation.

Sourcing and service information

Engineering field	Interpretation / condition
Title-area support	Sourcing Support; 12-Month Warranty
Dispatch Confirmation	Quantity and dispatch date confirmed in quotation.
Dedicated Manager	Personalized one-to-one VIP service
ISO 9001:2015 Certified	Trusted quality management
Warranty Policy	Review the applicable warranty coverage and claim process.
Return Notice	Obtain return approval before sending an item back.
Shipping Method	Worldwide shipping; freight and timing confirmed in quotation.
Parts Availability	Quantity, dispatch date and lead-time start confirmed in quotation.

Technical basis

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

Related platform references - separate selection review

General Electric IS215VPROH1BE	Emergency Turbine Protection Assembly
General Electric IS200TBAIH1CDD	Analog Input/Output Terminal Board

Engineering contact

Discuss the complete unit and installed application with Apter Power.
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