General Electric IS200TPROH1CBB

Complete Product Information

Product role

A Mark VIe backup-protection terminal board that conditions speed and PT signals for PPRO I/O packs and connects them to the selected trip-relay board.

Published product summary

Summary field	Published information
Product type	Backup Turbine Protection Terminal Board
Manufacturer part number	IS200TPROH1CBB
Shipping	Swift global dispatch
Condition	New, original product
Shipping size (est.)	33x17.7x5cm
Country of Origin	USA

Native product information

Product field	Published information
Manufacturer	General Electric
Product Category	Gas Turbine Control
Spare Part Number	IS200TPROH1CBB

Native product information - continued

Product field	Published information
Weight	0.9 kg
Tariff Code	8537101190

Overview

GE IS200TPROH1CBB combines field-signal termination with a three-pack backup-protection interface; H1C uses removable barrier terminals rather than the H2C Euro-style terminals.

Protection role	TPRO conditions backup-protection inputs; the selected relay board provides the trip interface.
Pack positions	R, S and T PPRO packs occupy JR1, JS1 and JT1.
Platform distinction	TPROH#C belongs to Mark VIe and is not supported by Mark VI control.

Selection and adjacent choices

IS200TPROH1CBB retains the H1C removable barrier-terminal arrangement. It supports the documented simplex or TMR PPRO architecture, with three pack positions and three DC-37 trip-board cable interfaces. The H2C Euro-terminal version and Mark VI TPRO arrangements have different installation boundaries and must not be substituted by name alone.

Operating relationship

The board conditions nine speed-input paths and includes bus/generator PT input functions. Magnetic pickup sensitivity depends on frequency, so a nominal pulse frequency is insufficient for an input test. The PT function also has an application enable condition; a disabled live value is not automatically a failed transformer input.

Integration implications

Customer P24 outputs are sourced from the ORed pack power path and are not voted outputs. Removing one pack therefore does not establish that the field sensor supply is dead. The connected trip board must be selected for its actual emergency-stop voltage, relay arrangement and output requirements; TPRO alone does not establish the complete trip-system rating.

Technical parameters

Parameter	Value / condition
Field terminals	2 removable 24-point barrier blocks
PPRO positions	3: JR1 / JS1 / JT1
Trip-board cable interfaces	3 x DC-37: JX1 / JY1 / JZ1
Speed input paths	9; 3 per R/S/T section
Magnetic pickup frequency	2-20000 Hz, documented matched system
Pulse-rate accuracy	0.05% of reading, documented matched system
Sensitivity, 0-2 kHz	27 mV peak-to-peak required
Sensitivity, 2-6 kHz	50 mV peak-to-peak required
Sensitivity, 6-10 kHz	100 mV peak-to-peak required
Sensitivity, 10-15 kHz	160 mV peak-to-peak required
Sensitivity, above 15 kHz	250 mV peak-to-peak required
PT input burden	<3 VA per input
PT synchronization range	75-130 Vrms
PT isolation barrier	1500 Vrms

Technical parameters - continued

Parameter	Value / condition
Customer sensor outputs	3 x 24 VDC, 25 mA maximum each; not voted
Operating temperature	-30 to 65 deg C, documented board design

Parameter applicability

TPROH1C barrier-terminal architecture applies to the offered BB revision at board-family level. Speed/PT and P24 values require the documented PPRO/TPRO system; pack supply ratings are not standalone board consumption.

System and supply context

IS200TPROH1CBB terminates backup turbine-protection signals for the Mark VIe PPRO architecture.

Integration boundary

Accept the H1C terminal form, pack generation, speed-sensor electrical type and selected trip-relay board as a coordinated protection path.

Applications / Compatibility

Magnetic speed protection

Use the frequency-dependent sensitivity requirement when testing turbine speed pickups.

Bus/generator PT monitoring

Retain the enabled PT function, rated test voltage and input isolation arrangement.

Three-pack backup protection

Map R/S/T packs and their trip-board cables to the approved redundant design.

Powered speed sensors

Review the non-voted P24 output and return path when using active/TTL sensor wiring.

Precautions scope

Preserve turbine-protection independence and verify all pack-derived field-power sources.

Installation precautions

Engineering field	Interpretation / condition
Maintain independent trip authority	Use the approved turbine-protection outage and test procedure before disturbing the backup path.
Confirm H1C terminals	Retain the removable barrier blocks and point map; do not infer H2C Euro-terminal equivalence.
Set test amplitude by frequency	Use the applicable sensitivity band when simulating magnetic speed inputs.
Check PT function enablement	Compare the K25A_Enab configuration before diagnosing a missing bus/generator live value.
Verify sensor-power isolation	Account for ORed pack supplies and measure P24 before handling active-sensor conductors.
Match the trip-board interface	Verify relay-board type, E-stop voltage and cable allocation; keep 240 VAC and DC circuits from unintended cross-connection.

Lifecycle and replacement

Engineering field	Interpretation / condition
Exact revision phase	The current manufacturing/support phase of IS200TPROH1CBB is unconfirmed.
Replacement architecture	Preserve the H1C barrier terminals and Mark VIe PPRO/trip-board relationship; a Mark VI TPRO board is not the same interface.
Manufacturer support review	Confirm the complete BB revision with the installed PPRO generation, trip-board model and protection configuration.
Supply distinction	Apter Power availability does not establish the manufacturer lifecycle or authorization for a turbine-protection change.

Available Unit Details

Engineering field	Interpretation / condition
Complete board identity	The offered identity is IS200TPROH1CBB; retain BB with the H1C terminal form.

Available Unit Details - continued

Engineering field	Interpretation / condition
Separate protection hardware	PPRO I/O packs and the backup trip-relay board are separate components unless expressly itemized.
Configuration evidence	Installed speed type, PT enablement and trip-board voltage must be established from the actual protection configuration.

Alternative Names

Variant	Complete-model spelling
1	GE IS200TPROH1CBB
2	General Electric IS200TPROH1CBB

Technical notes

Engineering field	Interpretation / condition
Pack power versus board load	The certificate pack supply figure belongs to the combined I/O pack system and is not a standalone TPRO consumption rating.
P24 continuity	The sensor output can remain powered by the other packs when one pack is off; isolation must be verified electrically.
Sensitivity acceptance	A low-amplitude high-frequency pulse can fail detection even when its frequency is within range; evaluate amplitude and frequency together.

Technical questions

Full-model question	Engineering answer
Does a TTL speed input on IS200TPROH1CBB use the same signal landing as a passive pickup?	The documented TTL table uses TB3 for TTL High and a corresponding even-numbered TB2 return. For the first R-path example, TTL High is TB3 pin 1 and its return is TB2 terminal 32. Reconcile sensor type, path and the approved wiring table together; copying a passive-pickup landing does not establish the TTL connection.

Technical questions - continued

Full-model question	Engineering answer
Can unused P24 capacity from other IS200TPROH1CBB outputs automatically support a 40 mA sensor?	Each of the three customer 24 V outputs is specified for a maximum 25 mA. The presence of three outputs does not document permission to pool them or parallel connections for a larger load. Compare each sensor demand with its assigned output and use an approved power arrangement when that demand exceeds the individual limit.
What PT cable condition should be retained when verifying IS200TPROH1CBB from a remote test point?	The documented PT input allows up to 1000 ft of 18 AWG wiring. That condition does not establish an arbitrary cable installation as equivalent. Record the installed conductor and length, compare voltage at the board under its input burden, and retain the bus/generator allocation; a correct voltage at the remote source alone is incomplete evidence.
Can equal bus and generator PT test voltages conceal swapped inputs on IS200TPROH1CBB?	Yes. The board has two separate bus/generator PT input functions, so applying the same test value to both does not distinguish their allocation. Under the authorized test plan, identify each source and compare its corresponding live channel separately, with the required application enable condition established before interpreting a missing value.
Does working PPRO Ethernet communication prove the trip-board cable path of IS200TPROH1CBB?	The pack network, direct pack-to-terminal connection and DC-37 relay-board connection are different interfaces. A healthy network service does not prove the correct JX1/JY1/JZ1 cable or relay-board identity. Reconcile the hardware ID and cable allocation, then verify the required end-to-end trip function under the approved protection test.
Do three pack mounting positions make every IS200TPROH1CBB arrangement a valid TMR system?	Mounting capacity alone does not define the installed protection architecture. The compatibility table distinguishes trip boards: TREG and TREL entries are TMR, while the listed TRES entries support simplex as well as TMR. Confirm the selected pack count, trip-board execution and controller configuration together before approving an arrangement.
Can the IS200TPROH1CBB PCB be mounted directly on metal when the carrier is changed?	The documented assembly includes a plastic insulator between TPRO and its sheet-metal carrier or panel-mount assembly. Preserve that insulating component and the intended mounting method during a mechanical change. A matching hole pattern does not establish the same electrical or mechanical assembly condition.
Does the 1500 Vrms PT isolation figure permit a 1500 V signal at an IS200TPROH1CBB input?	No. The isolation barrier and the 75-130 Vrms synchronization input envelope describe different conditions. Keep the actual signal within its operating envelope and follow the approved test method; a barrier withstand figure is not a measurement range or permission for a connected-system high-voltage test.

Downloads

Document	Content and format
Technical reference	Apter Power technical reference to H1C interfaces, frequency-dependent sensitivity and matched-system limits. PDF, 1 pages.
Engineering guide	Apter Power speed/PT injection and backup-trip interface acceptance guide. 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 IS200TPROH1CBB 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 IS200TPROH1CBB 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

Sourcing and service information - continued

Engineering field	Interpretation / condition
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 VIe Control Volume II System Hardware Guide, GEH-6721Q; GE Mark VIe IECEx UL 21.0067X Issue 6

Related components and selection comparisons

General Electric IS200TREGH1A	TREGH1A gas-turbine backup trip-board family in the TPRO cable-compatibility table; match E-stop, voltage and full revision.

Engineering contact

Discuss the complete unit and installed application with Apter Power.
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