

MANUFACTURER-SOURCE TECHNICAL REFERENCE

GE Vernova IS215VPROH1BD

Product Reference

GE Mark VI Emergency Turbine Protection Board



DOCUMENT SCOPE

Independent Apter Power manual compiled only from the cited GE Vernova manufacturer sources. No product photograph is included.

Product / lookup identity	GE Vernova IS215VPROH1BD
Reference number	IS215VPROH1BD
Document basis	Published GE Vernova product records, PDFs, and manuals listed on page 3



Product page

<https://www.apterpower.com/General-Electric/is215vproh1bd>
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Product role and published parameters

WHAT IT IS, WHAT IT DOES, AND WHERE IT FITS

GE IS215VPROHIBD is a VPRO emergency turbine protection board for the legacy Mark VI Protection Module, subject to confirmation of the full HIBD nameplate. VPRO forms an independent emergency overspeed and emergency-stop subsystem, separate from the primary turbine controller. Three redundant VPRO boards independently evaluate protection inputs and control voted trip-relay paths through TREG. The VPRO scheme...

Published field	Manufacturer-published value or verified identity note
Protection architecture	Triple redundant VPRO boards in a protection module separate from the turbine control system
Core functions	Emergency overspeed protection and emergency-stop functions
Trip path	Up to three trip solenoids per TREG path between TREG and TRPG; TREG supplies the positive side and TRPG the negative side of 125 V dc
HIB feature	Supports a second TREG board driven from VPRO connector J4
Input supply	125 V dc, specified range 70–145 V dc; onboard outputs 5 V dc and 28 V dc
Processing rate	Frame rate up to 100 Hz
Speed input range	MPU pulse rate 2 Hz to 20 kHz

System function and signal path

01	VPRO forms an independent emergency overspeed and emergency-stop subsystem, separate from the primary turbine controller. Three redundant VPRO boards independently evaluate protection inputs...
02	The VPRO scheme processes dedicated shaft-speed pickup pulses, emergency-stop and trip-interlock states and, where configured, generator/bus voltage, thermocouple and analog signals. It...
03	The protection path uses VPRO with TPRO, TREG and TRPG terminal boards; HIB can drive a second TREG through J4. VTUR/TRPG provides a separate primary protection path, allowing either the...

Applications, answers, and official sources

1 Independent emergency overspeed protection: Three redundant VPRO channels evaluate dedicated speed signals independently from the primary turbine controller.

2 Voted turbine trip operation: VPRO controls the TREG relay groups that vote trip commands to the turbine trip-solenoid paths.

3 Emergency-stop and trip-interlock handling: Processes configured hardwired emergency-stop and trip-interlock inputs in the protection module.

4 Dual-TREG HIB protection arrangements: HIB supports a second TREG through J4 where the unit's trip design requires the additional terminal board.

Frequently asked questions

What is the GE IS215VPROHIBD?	It is identified as an HIB-form VPRO emergency turbine protection board for a Mark VI Protection Module, pending confirmation of the full HIBD nameplate.
What does VPRO do in Mark VI?	It provides an independent emergency overspeed and emergency-stop trip path separate from the primary turbine controller.
Is the VPRO system redundant?	Yes. GEH-6421M describes three redundant VPRO boards in the independent protection module.
Which terminal boards work with VPRO?	The core protection arrangement uses TPRO and TREG with the trip path completed through TRPG; exact board forms must match the unit documentation.
Can VPROHIB support a second TREG?	Yes. GEH-6421M states that VPROH1A and VPROH1B support a second TREG through connector J4.
Is VPROH2B a direct replacement for VPROH1B?	Not where a second TREG is used. The official manual states that H2B omits second-TREG support.