GE GE □□□ Series Service Manual

IS200EISBH1A

1. Description

SPECIFICATIONS:

2. Specifications

Specification	Value
Board	**Description Exciter ISBus Board**
Board	**Type 3U**
Function	**Communication Interface**
Functional	**Acronym/Abbreviation EISB**
Location	**In Control Rack under DSPX**
Number	**of Indicators on Front of Board 6; Gen Field Voltage and Current; Exciter Voltage and Current; GND Detect Input and Output**
About	**the IS200EISBH1A**
The	**IS200EISBH1A model is an Exciter ISBus board that is part of the EX2100 Series produced by General Electric. This board specifically is a special communication interface board and is used in conjunction with the C, M1, and M2 control modules. Another function of the module is to transmit and receive fiber-optic signals through the backplane connector. There are six fiber-optic connectors that are on the front panel, and the generator field on the panel accepts current and voltages.**

3. Product Information

SPECIFICATIONS:

Part Number: IS200EISBH1A

Manufacturer: General Electric

Series: EX2100

Product Type: Exciter ISBus Board

Number of channels: 12

Input span: 4-20 mA

Common Mode Voltage Range: ±5 V

Maximum Lead Resistance: 15Ω

Analog output current: 0-20 mA

Operating temperature: -30 to 65 °C

Size: 8.26 cm high x 4.19 cm

Repair: 3-7 Day

Availability: In Stock

Country of Origin: United States

Manual: GEI-100454

FUNCTIONAL DESCRIPTION:

IS200EISBH1A is an Exciter ISBus Board manufactured and designed by General Electric as part of the EX2100 Series used in GE Excitation Control Systems. The Exciter ISBus Board (EISB) is a specialized communication board designed for the M1, M2, and C controllers. It handles the reception and transmission of fiber-optic feedback signals, forwarding these signals via the control backplane to the DSPX controller. Additionally, it facilitates communication between the DSPX and tool/keypad ports using RS-232C through the backbone connector. For setups with redundant exciters, the EISB incorporates ISBus interface electronics. ISBus, a proprietary GE communication interface, is used here to exchange data among the M1, M2, and C controllers of the exciter system. The EISB is a single-slot, 3U-high module situated in the control rack beneath the DSPX. Its front panel features fiber-optic connectors that receive current and voltage signals from the generator field (and optionally from the Exciter) via EDCF boards and also transmit signals to the Ground Detection module.

APPLICATION DATA:

The front panel of the board is equipped with six fiber optic connectors designed for receiving and transmitting variable frequency signals, which include:

DC voltage input from the Generator Field via the EDCF board

DC input from the Generator Field via the EDCF board

Optional voltage input from the Exciter via the EDCF board

Optional current input from the Exciter via the EDCF board

Voltage input to the Ground Detector

Voltage output from the Ground Detector

IS200EISBH1A Technical Specifications

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Function Communication Interface

Functional Acronym/Abbreviation EISB

Location In Control Rack under DSPX

Number of Indicators on Front of Board 6; Gen Field Voltage and Current; Exciter Voltage and Current; GND Detect Input and Output

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The IS200EISBH1A board transmits the feedback that it has received over the backplane controller to the DSPX control, it will also communicate between the tool and keypad ports using RS-232C and the DSPX module. This module typically will manage all of the fiber-optic communications throughout the cabinets. Physically the EISB module is a 3U high module, as well as a single slot. Part IS200EISBH1A will also transmit signals to the ground detection module (EGDM).