GE GE □□□ Series Service Manual

IS200ERIOH1AAA

1. Description

SPECIFICATIONS

3. Product Information

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Part No.: IS200ERIOH1AAA

Manufacturer: General Electric

Country of Manufacture: United States of America (USA)

Product Type: Exciter Regulator I/O Board

Availability: In Stock

Series: EX2100

Functional Description

IS200ERIOH1AAA is an exciter regulator I/O board developed by GE. It is part of the EX2100 series. The Exciter Regulator Main I/O Board (ERIO) serves as a vital component within the EX2100 regulator control systems, catering to both simplex and redundant configurations. Its primary function lies in providing the necessary I/O interface for customer and system I/O operations, facilitating seamless communication and control within the system architecture.

Role in Simplex Applications

In simplex applications, the board is mounted within the Exciter Regulator Backplane (ERBP). Here, it assumes the critical task of interfacing customer I/O signals for other essential components such as the Exciter PT/CT Terminal Board (EPCT) and the Exciter Contact Terminal Board (ECTBG2).

Additionally, it handles system I/O signals for components like the Exciter Regulator Dynamic Discharge board (ERDD) and the Exciter Regulator Options Card (EROC), ensuring smooth functionality and integration within the simplex configuration.

Redundant Configurations

In redundant configurations, the board continues to play a pivotal role by providing seamless I/O interface functionality, albeit within a redundant system setup.

Its role remains consistent, ensuring reliable communication and control between various system components, thereby enhancing system robustness and fault tolerance.

Features

Form Factor and Connectors: Adopts a single-slot double-height (6U) form factor and features both P1 and P2 backplane connectors, each serving distinct purposes in the interface hierarchy.

Functionality of Connectors: While the P1 connector serves as a slave interface for communication with other system components, the P2 connector acts as the primary interface for I/O signals and connections with other backplane-mounted boards.

External Connections: The faceplate integrates two 25-pin sub-D connectors, strategically positioned to establish direct connections with external components such as the ECTB and EPCT terminal boards.

Enhanced Versatility: The dual-connector setup and external connectors enhance the versatility, enabling seamless interaction with various system elements and external components.

Application Data

Form Factor and Connectivity: Boasts a single-slot double-height (6U) form factor, ensuring compatibility and efficient utilization of space within the system setup. Equipped with both P1 and P2 96-pin backplane connectors, the board facilitates robust connectivity and communication within the system.

Interface with Terminal Boards: Functionality extends to direct interaction with terminal boards such as the Exciter Contact Terminal Board and Exciter PT/CT Terminal Board. This interaction is facilitated through two 25-pin sub-D receptacle connectors located on the ERIO faceplate, ensuring seamless integration and communication between the ERIO and these essential components.

Diagnostic Capabilities: Furthermore, it enhances diagnostic capabilities through the inclusion of a 9-pin sub-D receptacle connector labeled "TEST" on its faceplate. This connector serves as a diagnostic interface, enabling the monitoring and troubleshooting of system performance and functionality.