# GE GE □□□ Series Service Manual

IS200ERBPG1A

## 1. Description

IS200ERBPG1A Technical Specifications

## 2. Specifications

| Specification | Value |
|---|---|
| Board | **Description Exciter Regulator Backplane Module** |
| Functional | **Acronym/Abbreviation ERBP** |
| Manufacturer | **GE Industrial Systems, General Electric Company US** |
| Operating | **Mode Simplex or Redundant** |
| Power | **Connectors Power Negative (TB2) and Power Positive (TB1)** |
| Quantity | **of Keypad Connectors 1, J4** |
| Weight | **Approximately 3 pounds** |
| About | **the IS200ERBPG1A** |
| Exciter | **Regulator Backplane Module IS200ERBPG1A is one of the backplane boards within the EX2100 series and can be used with the Mark VI series from GE as well. The power connectors of the board are at the bottom, they are labeled TB1 and TB2, the negative power will be connected to TB2 and the positive power will be connected to the TB1. In the top corner of the board, there are five connectors; one of them is a keypad connector, three are three-position female plug connectors, and the fifth is a twelve-position female plug connector.** |

## 3. Product Information

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The IS200ERBPG1A can also be integrated to connect with stand-alone retrofitted applications, these applications should have Ethernet Modbus or serial communication protocols built in. The ERBP board provides connectivity to a number of different EX2100 boards such as the EPSM and DSPX modules.

SPECIFICATIONS

Part Number: IS200ERBPG1A

Manufacturer: General Electric

Series: EX2100

Function: Exciter Regulator Backplane

Availability: In Stock

Country of MAnufacture: United States(USA)

Functional Description

IS200ERBPG1A is an EX2100 Exciter Regulator Backplane (ERBP) designed by General Electric. It is a part of the EX2100 series used in the Excitation control systems. The Exciter Regulator Backplane (ERBP) is a fundamental component in EX2100 regulator control systems, primarily facilitating connectivity and communication between the various printed circuit boards it houses. The board acts as a central connectivity hub, interconnecting all mounted printed circuit boards within the system. It establishes vital connections and pathways for communication and data exchange among these boards.

Features

Power Support: On its front panel, the Backplane board provides power connectors for external boards it supports, enabling power supply connections for these additional components. It also offers connections for fan power output, contributing to system cooling.

Versatile Backplane Connectors: The board is equipped with 3U or 6U Versa Module Euro (VME) 96-pin or 128-pin DIN backplane connectors, facilitating the insertion and connectivity of boards within it. Power distribution to these mounted boards is managed through these connectors.

Board Identification System: Included within is a board identification (ID) serial bus, serving as a standardized interface for all installed boards. Each board contained within the ERBP is equipped with a board ID device programmed with essential information such as the barcode serial number, board type, and hardware revision. This data enables seamless interaction with the associated control for the specific backplane slot.

Master Selection Jumpers: Incorporates master selection jumpers, offering the flexibility to configure the system for either simplex or redundant exciter regulator applications. These jumpers play a critical role in determining the system's operating mode as per the application's requirements. The Exciter Regulator Backplane serves as a pivotal infrastructure component, providing not only connectivity but also standardized identification and power distribution functionalities crucial for the smooth operation and management of the EX2100 regulator control systems.

Mounted Boards

The board contains the following boards inserted into its backplane connectors:

Application Control Layer board (ACLA)

Digital Signal Processing board (DSPX)

Exciter Regulator Input/Output board (ERIO)

Exciter Power Supply Module (EPSM)

IGBT Exciter Regulator Interface and Dynamic Discharge board (ERDD)

Exciter Regulator Options Card (EROC)

Connectors

J1F1 - Fan 1 power

J1F2 - Fan 2 power

J5M1 - Exciter Regulator Redundant Relay board (ERRR) power

J3 - Exciter Regulator Redundant Backplane (ERRB) power

J4 - Keyboard interface

J16 - Exciter Dc Feedback board (EDCF) power