GE GE □□□ Series Service Manual

531X111PSHARG3

1. Description

531X111PSHARG3 Technical Specifications

2. Specifications

Specification	Value
Manufacturer	**General Electric**
Series	**531x Boards**
Part	**Number 531X111PSHARG3**
About	**the 531X111PSHARG3**
The	**531X111PSHARG3 card is a motor field control and power supply board. It was manufactured by General Electric for their 531X replacement board series. Drives and exciters developed by GE can have this card installed. The drive's required power supply is provided by this card. Motor field circuitry can also be powered with this device. This is a G3 version of the board, meaning that the MOVs for the AC line are mounted externally rather than on the board.**

3. Product Information

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Series 531x Boards

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About the 531X111PSHARG3

The 531X111PSHARG3 card is a motor field control and power supply board. It was manufactured by General Electric for their 531X replacement board series. Drives and exciters developed by GE can have this card installed. The drive's required power supply is provided by this card. Motor field circuitry can also be powered with this device. This is a G3 version of the board, meaning that the MOVs for the AC line are mounted externally rather than on the board.

Drive operation is reliant on the 531X111PSHARG3 power supply board functioning properly. This card can produce three power supplies rated at 5 VDC, 15 VDC, and 24 VDC. An integrated pulse transformer on the card provides power to the motor field circuitry in the drive. Device controls are performed via the three onboard relays. The three are comprised of K1 (RUN), K2 (MAX), and K3 (FAULT). An additional three potentiometers are also found on the board. These include P1 FIELD SCALE, P2 CFB ZERO, and P3 CFB ADJUST, with all providing users with the ability to adjust and calibrate current feedbacks and circuits. Feedback and current signals in the card can be adjusted using the the five configurable jumpers found on the card.

General Electric includes a set of installation parameters that users should meet. Risks of damages to the device are lessened by following these guidelines. 531X111PSHARG3 should only be installed by trained personnel that are qualified to handle boards like this. An illustrated wiring guide can be found in the manual and datasheet associated with the board. Originally, General Electric provided technical support for this board.

SPECIFICATIONS

Part No.: 531X111PSHARG3

Manufacturer: General Electric

Country of Manufacture: United States (USA)

Product Type: Field Exciter

Series: EX2000

531X111PSHARG3 is a Motor field control and power supply board developed by GE. It is a part of the GE EX2000 excitation system. This card provides the necessary power supply for the drive. This component can also be used to power motor field electronics. The MOVs for the AC line are located externally rather than on the board because this is a G3 version of the board.

531X111PSHARG3 Features

The power supply board's efficiency is necessary for drive operation. Three power supplies with a 5 VDC, 15 VDC, and 24 VDC rating can be created with this device. The motor field circuitry in the drive is powered by an integrated pulse transformer on the card. The three onboard relays are used to control the devices. K1 (RUN), K2 (MAX), and K3 make up the trio (FAULT). On the PCB there are also three more potentiometers.

These three enable users to calibrate and alter current feedbacks and circuits: P1 FIELD SCALE, P2 CFB ZERO, and P3 CFB ADJUST. The five programmable jumpers on the card can be used to change the card's feedback and current signals.

Functional Description

The power source needed by the drive to function is provided by this power supply board. It also has the necessary tools to power the motor field circuits on the board. This card, which is a G2 revision of the board, was created for usage with external exciters. This card has undergone various changes, yielding in various board arrangements. This card is a G3 revision with all MOVs mounted externally and connected to the AC line.

531X111PSHARG3 Installation

Users must adhere to a set of installation requirements provided by General Electric. By adhering to these recommendations, the risk of harm to the equipment is reduced. Only trained professionals who are certified to handle boards like this should install 531X111PSHARG3. The handbook and datasheet that go with the board both have an illustrated wiring diagram. Technical assistance for this board was first supplied by General Electric.

Characteristics

Dimensions: 4 cm x 24 cm x 29.2 cm

Weight: 0.58 kg