GE Service Manual

DS200FSAAG1ABA

1. Description

DS200FSAAG1ABA Technical Specifications

2. Specifications

Specification	Value
Original	**Manufacturer GE General Electric**
Original	**Product Series Mark V**
Alphanumeric	**Part Number DS200FSAAG1ABA**
Functional	**Description Field Supply Amplifier**
Functional	**Acronym FSAA**
PCB	**Coating Style Normal Coating**
1st	**Functional Revision A**
2nd	**Functional Revision B**
Artwork	**Revision A**
About	**the DS200FSAAG1ABA**
This	**DS200FSAAG1ABA Field Supply Gate Amplifier Board was manufactured for the Mark V Series of major automated drives retailer General Electric. The Mark V Series that this DS200FSAAG1ABA PCB is considered a member of is one of the more recent product line developed using General Electric's Speedtronic technology, and is centered around the production of printed circuit boards and other component products crucial for the functioning of turbine control systems specifically.**

3. Product Information

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This DS200FSAAG1ABA General Electric printed circuit board is not actually the original Field Supply Gate Amplifier Board that was designed and manufactured for the Mark V Series; that would be the DS200FSAAG1 printed circuit board missing this specific product's three signficant product revisions.

Hardware Tips and Specifications

The internal and external assembly of this DS200FSAAG1ABA Field Supply Gate Amplifier Board is unique due to its unique functionality within the greater Mark V Series. The GE Field Supply Amplifier Board DS200FSAAG1ABA features:

5 jumpers

one 10-pin connector

two fuses

multiple test points

The GE Field Supply Amplifier Board DS200FSAAG1ABA is subject to damage from static electricity that can build up on your body and on the board. There are several guidelines to follow once you receive the replacement board and during the replacement procedure, as revealed in original General Electric instructional manuals. The DS200FSAAG1ABA board is shipped in a sealed bag made of a plastic that is treated to prevent the flow of static through the bag and onto the board; the best practice is to keep the board in the sealed bag until you are ready to install it.

During installation of this DS200FSAAG1ABA PCB, you must wear a wrist strap because it drains off any static that accumulates on the board or on your body while you wear it. When the strap is attached to an unpainted metal surface, the static seeks ground as provided by the metal, so clip the strap to a metal support on a workbench or other structure.

Another installation consideration is to refrain from walking around with the board because walking causes static to build up, especially in cool and dry conditions.

This DS200FSAAG1ABA printed circuit board's DS200FSAAG1ABA functional product number is a strong source of original product-specific information, including this PCB's:

domestic manufacture location

normal style of Mark V Assembly

FSAA functional acronym

normal style of PCB coating

three significant product revisions

The G1 series grouping tag that designates this product's normal style of PCB coating is also indicative of this DS200FSAAG1ABA Field Supply Gate Amplifier's Mark V Series Group 1 product grouping.

SPECIFICATIONS

Part Number: DS200FSAAG1ABA

Manufacturer: General Electric

Series: Drive Control

Product Type: Field Supply Gate Amplifier Board

Temperature: 0 to 60oC

Availability: In Stock

Country of Manufacturer: United States (USA)

Functional Description

DS200FSAAG1ABA is a Field Supply Gate Amplifier Board developed by General Electric. It is a part of Drive Control series. The board features phase control to regulate four silicon-controlled rectifiers (SCRs). These SCRs enable the plugging operation, a characteristic feature of the model. Jumpers on the model facilitate the provision of an NRX function in the event of excessive field issues encountered during the non-reversing plugging (NRP) application.

Features

Compatibility: The model is versatile, capable of operating in both NRP and NRX functions, providing flexibility in various operational scenarios.

Fuse Protection: Equipped with two Limitron fast-acting fuses, each with a KTK symbol and rated at 30 amps, the model safeguards fields up to 24 A and the alternating current (AC) metal-oxide varistor (MOV). For fields exceeding 24 A, larger external fuses are required to feed the field.

Terminal Connector: The model features a 10-pin terminal connector labeled FPL, providing a convenient interface for connectivity within the drive system.

Functionality: Offers control of silicon-controlled rectifiers P2 and N2, enabling them to turn on independently when their anode voltage is positive. The model is specifically designed to function only in NRX mode, lacking the capability to operate in NRP mode like its counterpart.

Attributes

Field Supply Regulation: As a Field Supply Gate Amplifier Board, the component is tasked with regulating field supplies within drive systems, ensuring consistent and reliable operation

of associated machinery and equipment.

Amplification Capabilities: Leveraging advanced amplification technologies, the board boosts control signals to effectively manage field supply voltages, enabling precise control and modulation as per system requirements.

Compatibility: Designed with versatility in mind, the card is compatible with a wide range of drive systems, offering seamless integration and interoperability across diverse industrial applications.

Robust Construction: Engineered with high-quality materials and built to stringent quality standards, it boasts robust construction, ensuring durability and reliability in demanding industrial environments.

Diagnostic Capabilities: Equipped with diagnostic features, it provides valuable insights into the health and status of field supplies and associated components. Comprehensive diagnostics enable the timely identification and resolution of issues, minimizing downtime and optimizing system performance.

Safety Features: Compliant with industry standards and regulations, it incorporates safety features to protect both personnel and equipment during operation. These features enhance operational safety and mitigate the risk of accidents or malfunctions.