GE Service Manual

DS200LPPAG1AAA

1. Description

DS200LPPAG1AAA Technical Specifications

2. Specifications

Specification	Value
Part	**Number DS200LPPAG1AAA**
Series	**Mark V**
Manufacturer	**GE General Electric**
Instruction	**Manual GEI-100178**
Product	**Type Line Protection Panel Board**
Functional	**Acronym/Abbreviation LPPA**
System	**Input Voltage 200-600 VAC**
Group	**Revision G1**
About	**the DS200LPPAG1AAA**
This	**DS200LPPAG1AAA product offering is a printed circuit board originally manufactured for placement in General Electric's Mark V Turbine Control System Series. This series is also one of the final General Electric product series to make use of the company's patented Speedtronic control system technology first introduced in the later 1960s.**

3. Product Information

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This DS200LPPAG1AAA printed circuit board or PCB for short is better-definable through its official functional product description as a Line Protection Panel Board, as included in the DS200LPPAG1AAA instructional manual attached above.

This DS200LPPAG1AAA PCB is not the originally-designed product of its functionality to make an appearance within the Mark V; that would be the DS200LPPAG1 parent Line Protection Panel Board missing all three of the DS200LPPAG1AAA PCB's three significant product revisions.

Hardware Tips and Specifications

As with any Mark V Turbine Control System Series product offering, the DS200LPPAG1AAA PCB's assembly is accompanied by its own series of functionality-enhancing hardware component inclusions and specifications. The GE Line Protection Board, DS200LPPAG1AAA, features seven jumpers and two terminal blocks with three terminals on each. The jumpers are identified as JP1 through JP7. The GE Line Protection Board DS200LPPAG1AAA also contains test points. The DS200LPPAG1AAA board is installed on standoffs on another component of the drive. The signal wires that connect to the board originate on the other component.

Luckily enough for the purposes of this DS200LPPAG1AAA Board personalized product page, the specific applications and functions of each jumper in this DS200LPPAG1AAA Board's assembly has been described in its originally-printed instructional manual materials. The DS200LPPAG1AAA Board's seven jumpers include:

The JP1, JP2, and JP3 MOV or ac line filter blown fuse indication jumpers

The JP4 and JP7 ac or dc side connection analog ground current sensing jumpers

The JP5 grounding resistor bridge voltage application jumper

The JP6 SCR ripple filter jumper

Each jumper in this DS200LPPAG1AAA Line Protection Panel Board's assembly has been named through a combination of their factory-printed nomenclature labels and specific DS200LPPAG1AAA Board functionality.

If you suspect that the DS200LPPAG1AAA board is not functioning properly, there are several steps you can take to determine if the board is faulty. The first step is to access the diagnostic tool contained in the drive to produce a report on the health of the functions and components. The diagnostic tools are a menu selection on the control panel. Once the diagnostic report is complete, you can view it on the control panel display or download the file to a laptop. The file can be saved, and you can compare the diagnostic results before and after your repair actions.The module has a menu-driven interface one selection is to access the diagnostics. The other menu selection enables you to download and upload files from a laptop connected through a serial cable.

Other menu selections are to access the sections of the drive configuration and edit the parameters. The parameters define the behavior of the drive during operation.The keypad on the DS200LPPAG1AAA contains buttons that enable the operator to control the drive directly without changing the parameters. The operator can stop and run the drive and select to speed up or slow down the drive, depending on predetermined parameters.

Product Specifications

Part Number: DS200LPPAG1AAA

Manufacturer: General Electric

Series: Mark V

Product Type: Line Protection Panel Board

Number of input channels: 12

Number of outputs: 125 V dc

Power supply voltage: 28 V dc

Input Voltage: 230 to 600 VAC

Mounting Type: Chassis Mount

Technology: Surface mount

Operating temperature: 40 to 85°C

Size: 33.0 cm x 17.8 cm

Repair: 3-7 Day

Availability: In Stock

Country of Origin: United States

Manual: GEI-100178

Functional Description

The DS200LPPAG1AAA is a Line Protection Panel Board (LPPB) designed by General Electric for the Mark V Series within GE Speedtronic Gas Turbine Control Systems. It serves as a vital component in electrical systems, housing protective devices to safeguard equipment, personnel, and electrical lines from overloads, faults, short circuits, and other disturbances.

Key Components and Functions:

Circuit Breakers: These primary protective devices automatically trip to interrupt the electrical circuit when abnormalities like ground faults, short circuits, or overcurrent are detected.

Surge Protection Devices (SPDs): These protect against transient events, such as switching operations or lightning strikes, by diverting excess voltage to the ground to prevent equipment damage.

Overcurrent Protection: Devices like circuit breakers or fuses prevent excessive current flow to avoid fire hazards and overheating.

Ground Fault Protection: Ground fault protection relays (GFPRs) or ground fault circuit interrupters (GFCIs) detect leakage currents and interrupt the circuit to prevent electric shock hazards.

Monitoring and Control Systems: Advanced LPPBs may include these systems to provide real-time status data on electrical parameters and offer remote monitoring capabilities for improved management.

Isolation and Disconnect Switches: These are utilized to isolate sections of the electrical system for troubleshooting or maintenance, allowing for the safe de-energizing of specific parts.

Status Indicators and Alarms: These are often included to alert operators to faults or abnormal conditions detected within the electrical system.