GE Service Manual

DS200RTBAG3AGC

1. Description

DS200RTBAG3AGC Technical Specifications

2. Specifications

Specification	Value
Manufacturer	**GE General Electric**
Series	**Mark V**
Part	**Number DS200RTBAG3AGC**
Functional	**Description Relay Terminal Board**
Instruction	**Manual GEI-100167**
Functional	**Acronym RTBA**
PCB	**Coating Normal Coating**
Functional	**Revision 1 A**
About	**the DS200RTBAG3AGC**
DS200RTBAG3AGC	**is a Mark V series relay terminal board developed by General Electric. This DS200RTBAG3A printed circuit board's status a Relay Terminal Board is backed by this functional description's appearance in relevant General Electric instructional manual materials, as well as through the inclusion of the RTBA functional acronym in the DS200RTBAG3A alphanumeric product number. This DS200RTBAG3A printed circuit board or PCB for short is not the original Relay Terminal Board that was manufactured for the Mark V Turbine Control System Series, although it does feature the normal Mark V Series assembly style utilized by the original product.**

3. Product Information

DS200RTBAG3AGC Technical Specifications

Manufacturer GE General Electric

Series Mark V

Part Number DS200RTBAG3AGC

Functional Description Relay Terminal Board

Instruction Manual GEI-100167

Functional Acronym RTBA

PCB Coating Normal Coating

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About the DS200RTBAG3AGC

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The original Relay Terminal Board created and produced for the Mark V Series is the DS200RTBAG3AGC parent printed circuit board, which is notably missing this DS200RTBAG3A product offering's singular A-graded functional product revision.

Hardware Tips and Specifications

This DS200RTBAG3AGC Relay Terminal Board or Relay Terminal Board assembly includes both a number of product-specific and Mark V Series-streamlined hardware components to reach its original intended functional status within the greater Mark V Series and Mark V Series automated drive assembly. Installed hosts are provided with an additional ten relay points when using this board. A number of GE brand exciters and drives can have this card installed into their operating cabinets. The relays can be driven remotely by the user or by the onboard LAN I/O terminal control board.

On this board, the ten relays are comprised of two different types. Seven of the relays are DPDT type found in locations K20 through K26. Individually, DPDT relays each include two Form C contacts in the assembly of this DS200RTBAG3A Relay Terminal Board. Each contact on these types of relays rate at 10A, while the other three relays in positions K27 through K29 are 4PDT type. These relays types include four Form C contacts, with contacts within these rate at 1A each. I/O for all relays is protected by a 130 VAC MOV (metal oxide varistor), and each relay also contains a 110 VDC coil to ensure proper board function. Should any relay fail, users can quickly and easily remove and replace any relay found on DS200RTBAG3A.

Both the board and the drive are provided a set of installation parameters determined by the manufacturer. Following these will ensure that the board and its installed drive operate as expected. To review a complete wiring guide for DS200RTBAG3A, please refer to either the series manual or the device datasheet. The Mark V series of optional and replacement boards was originally provided with technical service by the manufacturer, General Electric.

General Information

Part Number: DS200RTBAG3AGC

Manufacturer: General Electric

Country of Manufacture: United States (USA)

Series: EX2000

Function: Terminal Board

Product Overview

The DS200RTBAG3AGC is an RTBA Relay Terminal Board developed by GE under the EX2000 series. It serves as a supplemental board located inside the drive or exciter cabinet. It features ten relays that can be operated remotely by the user or directly from the pilot relays on the LAN I/O Terminal Board. Among these, seven relays are DPDT (two Form C contacts) and three are 4PDT (four Form C contacts).

DS200RTBAG3AGC Board Relay Replacement

To replace an RTBA board relay, follow these steps:

Cut off the drive's power.

Access the board by opening the drive's cabinet door (the board is typically found beneath the board rack).

Press on the top of the retaining clip and pull on either side to release it, then remove it from the relay requiring replacement.

Pull the outdated relay out of the relay socket.

Position the new relay into the socket (it only fits one way) and push it into place.

Stab Connector Descriptions

CPH: Positive side (hot) pluggable circuit control power for RTBA Board pluggable circuits.

CPN: Pluggable circuit control power negative side for RTBA Board pluggable circuits.

DS200RTBAG3AGC Board Replacement

To replace an RTBA board, follow these steps:

Turn off the drive's power, wait a few minutes for the capacitors to discharge, and test electrical circuits before handling.

Access the board by opening the cabinet door on the drive.

Carefully detach cables from the RTBA board:

Take hold of the cable connector's mating sides on ribbon cables and gently pull them apart from the board connector.

If there are pull tabs, pull the tab slowly.

Unscrew the screw at the top of each RTB terminal to release fastened wires, and carefully pull each wire-free (label wires for easier reconnection).

CP1PL–CP5PL and Y9PL–Y37PL two-conductor plugs have built-in holding clips.

Depress the connector lever to release the connector.

Remove the four washer-mounted screws holding the RTBA board to the four standoffs, taking care not to drop mounting hardware into the device.

Place all configurable components in the same positions on the replacement board as they were on the old board.

Assemble the new board on the four standoffs using the four screws and washers removed in step 4.

Reattach all cables disconnected in step 3, ensuring each connector is seated correctly on both ends.

Attach each individual wire as indicated by the labeling, ensuring each wire is securely fastened in the terminal.