GE Service Manual

DS200RTBAG3AHC

1. Description

DS200RTBAG3AHC Technical Specifications

2. Specifications

Specification	Value
Manufacturer	**GE General Electric**
Series	**Mark V**
Part	**Number DS200RTBAG3AHC**
Functional	**Description Relay Terminal Board**
Instruction	**Manual GEI-100167**
Functional	**Acronym RTBA**
PCB	**Coating Normal Coating**
Functional	**Revision 1 A**
Functional	**Revision 2 H**
Artwork	**Revision C**
About	**the DS200RTBAG3AHC**
This	**DS200RTBAG3AHC Mark V Turbine Control System Series product offering is a printed circuit board designed and manufactured by General Electric, as established in the short DS200RTBAG3AHC product description inserted for your convenience above. The Mark V Series that this DS200RTBAG3AHC printed circuit board or PCB for short belongs to has a set of specific applications in the management and control systems of popular and compatible wind, steam, and gas turbine automated drive assemblies.**

3. Product Information

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This DS200RTBAG3AHC product's greater Mark V Turbine Control System Series is still something of a highly-sought product series on the greater automated industrial marketplace, as it exists as one of the lastly-developed GE Mark product series to utilize the patented Speedtronic control system technology seen first with the rollout of the initial Mark I Series in the mid to later 1960s.

Hardware Tips and Specifications

The GE Power Excitation Board DS200RTBAG3AHC is an optional board that is installed in the drive cabinet and it features ten relays that are driven either directly from the pilot relays or remotely by the user. The DS200RTBAG3AHC board has 52 terminal points. The terminal points are for I/O purposes. For example, one series of terminal points is for relay K20 form C contact. One terminal point is for the normally open position, one terminal point is for common, and one terminal point is for the normally closed position.

This DS200RTBAG3AHC PCB is not the originally-produced device of its specific Mark V Series functional role; that would be the DS200RTBAG3A parent Relay Terminal Board missing this DS200RTBAG3AHC device's full three-fold revision history.

The DS200RTBAG3AHC functional product number itself can be defined as a primary source of DS200RTBAG3AHC Board hardware component and component specification information; coding for specific details in a series of consecutive functional naming components. For instance, the DS200RTBAG3AHC functional product number is started by an instance of the dual-functional DS200 series tag dictating this DS200RTBAG3AHC Board's normal Mark V Series assembly as well as its domestic original manufacture location. Some of the other relevant hardware information revealed in the DS200RTBAG3AHC functional product number includes this PCB's:

RTBA functional product acronym

Normal PCB coating style

Group three Mark V Series grouping

Three-fold revision history

The board also has two stab connectors. The connectors are CPH and CPN and they provide pluggable circuit control power. CPH is the positive power connector and CPN is the negative power connector. The pluggable circuits that provide power are the C1PL through C5PL and Y9PL through Y37PL pluggable circuits. For example, one connector provides the positive pluggable circuit control power. And another is for the negative pluggable circuit control power. The DS200RTBAG3AHC board contains high energy and is a safety risk if it is touched while power is connected to the board. It is also a risk to touch any other components in the drive.

You must follow a procedure to disconnect all power from the drive and the board. First, use the control panel to stop the motor and use the standard procedure to shutdown the drive in an orderly fashion. To disconnect all power from the drive locate the power supply that provides the 3-phase electrical current and pull out the fuses. This DS200RTBAG3AHC device's voltage suppression and regulation strategy generally involves the incorporation of a Mark V Series-standardized series of voltage-limiting hardware components including various styles of capacitors, resistors, and diodes into its normal Mark V Series assembly.

Specifications

Part No.: DS200RTBAG3AHC

Manufacturer: General Electric

Country of Manufacture: United States of America (USA)

Temperature: 0 to 60 oC

Product Type: Relay Terminal Card

Availability: In Stock

Series: EX2000

Functional Description

DS200RTBAG3AHC is a Relay Terminal Card developed by GE. It is a part of EX2000 excitation system. The GE Power Excitation Board is an elective component designed for installation within the drive cabinet, featuring ten relays that can be activated either directly from the pilot relays or through remote control by the user. With a total of 52 terminal points, the board serves as a versatile hub for Input/Output (I/O) functionalities.

Features

Terminal Point Allocation: The terminal points are dedicated to specific I/O purposes, exemplified by a distinct series for relay K20 Form C contact. Within this series, individual terminal points cater to the normally open position, common connection, and the normally closed position, offering a detailed and customizable framework for relay control.

Stab and Pluggable Connectors: In addition to the extensive terminal configurations, the board incorporates two stab connectors, namely CPH and CPN. These connectors play a crucial role in providing control power for pluggable circuits. CPH functions as the positive power connector, while CPN serves as the negative power connector. The pluggable circuits receiving power are denoted by the connectors C1PL through C5PL and Y9PL through Y37PL.

Relay Configurations: * Relays K20 to K26: Identified by part number 68A9663PAC115X. They feature a 115 V ac coil and are configured with Double Pole, Double Throw (DPDT)

contacts capable of handling a substantial 10 A current.

Relays K27 to K29: Identified by part number 336A5101PAC115. They also feature a 115 V ac coil but boast a Four Pole, Double Throw (4PDT) configuration, offering precision with 1 A contacts.

Design Reliability: These relays, known for their robust design and reliable performance, serve as integral components within the system, facilitating efficient electrical control with their distinct contact configurations and specifications.

Connector OPTPL Pin Descriptions

Pin No. 1: Labeled X2, signifies the return to the NTB/3TB board for CFX1 120 V ac loads, all while maintaining isolation from COM. Interestingly, Pin No. 1 also shares the same functionality as RPL-1.

Pin No. 2: Designated as CFX1, it represents a 120 V ac source with a tolerance of ±15% derived from the NTB/3TB board. This particular pin is fused at a total of 500 mA, inclusive of internal fans, and remains isolated from COM. The structured format of the text enhances the clarity and comprehensibility of these connector pin descriptions, providing essential information for effective system understanding and configuration.

Stab Connector Descriptions

CPH Connector: Designated for the positive side of pluggable circuit control power, often referred to as the hot side.

CPN Connector: Conversely, the CPN connector is assigned to the negative side of pluggable circuit control power for Board pluggable circuits. The structured format enhances the clarity and organization of these connector descriptions, providing essential information for configuring and understanding the control power aspects of the Board pluggable circuits.