GE Service Manual

DS200PCCAG7ACB

1. Description

DS200PCCAG7ACB Technical Specifications

2. Specifications

Specification	Value
Manufacturer	**GE Industrial Control Systems**
Series	**DC2000**
Part	**Number DS200PCCAG7ACB**
Functional	**Abbreviation PCCA**
Functional	**Description Power Connect Card**
Approximate	**Dimensions (in) W11 x L8.5**
PCB	**Coating Normal Coating**
Functional	**Revision 1 A**
Functional	**Revision 2 C**
Artwork	**Revision B**
Instruction	**Manual GEI-100161**
About	**the DS200PCCAG7ACB**
The	**GE Industrial Control Systems DC2000 series DC Power Connect Board DS200PCCAG7ACB serves as a crucial interface between the greater DC200 drive and the SCR power bridge. It's important to note that the DS200PCCAG7ACB board is not repairable and does not contain serviceable parts. If the board exhibits unexpected behavior, it should be replaced entirely.**

3. Product Information

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Series DC2000

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Functional Revision 1 A

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Instruction Manual GEI-100161

About the DS200PCCAG7ACB

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Hardware Tips and Specifications

The PCCA possesses a total of ten potential group numbers, and the specific group number employed within a system is determined by factors such as the system voltage, frame size, and whether the system utilizes regenerative or non-regenerative power conversion methods. This specific DS200PCCAG7ACB model is a member of the seventh group, as designated by the "G7" portion present in its product number. As outlined in its corresponding GE Instructional Manual above; the DS200PCCAG7ACB's Group seven status lends itself to a number of unique product specifications, including:

both AC and DC type snubbers

a C or G style of frame

power supply board SDCI compatibility

<600 V rms AC volts

line fuses and reactors

separate or common bus transformer compatibility

Beyond the easily-distinguishable specifications revealed through this product's group number designation, a wealth of additional information is available for the DS200PCCAG7ACB through a careful analysis of its instructional manual. This is a customizable model of DC2000 series product; featuring an elevated number of adjustable hardware jumpers. In total, the DS200PCCAG7ACB, abbreviated commonly as PCCA, has four adjustable hardware jumpers available affixed to its base plate. As with many of the components on the face of this PCB, this PCCA board's four adjustable jumpers are specifically labeled. The first two of these jumpers are connected to appropriate stab terminals in locations P3 to P10, and are labelled as JP1 and JP2. The final two customizable hardware jumpers on the DS200PCCAG7ACB are WP3 and WP4, and are used in order to conjoin P2A to P2B, and P1A to P1B, respectively. Voltage protection for this PCCA component board are handled by a series of present snubber circuits, as well as multiple pulse transformers.

Installation Tips and Specifications

A number of important specifications are crucial to the proper and safe installation of this PCCA module. When replacing the DS200PCCAG7ACB board, it is recommended to utilize the downtime for drive replacement to perform periodic maintenance as well. This ensures that the drive remains in optimal working condition and avoids the need for separate maintenance scheduling.

The drive is designed for generally minimal maintenance and has a long service life. During the power-off state, which is needed for any attempt at safe module installation; it is advisable to inspect the motor for any dust or debris accumulation. Clean the motor and all components using a mild cleaner and a cleaning cloth, avoiding harsh cleaners that may damage terminals, connectors, and solder points.

Additionally, it is crucial to check the tightness of all wires and cables, ensuring secure connections. Inspect cables for signs of fraying, wear, and worn insulation, tightening any loose cables as needed. Follow the torque tightening guidelines provided and ensure that cables meet the specified torque tightening specifications, which can be found on a label on the drive.

Specifications

Part No.: DS200PCCAG7ACB

Manufacturer: General Electric

Product Type: Power Connect Card

Series: Mark V

Product Overview and Maintenance

The DS200PCCAG7ACB is a Direct Current Power Connect Card developed by General Electric for the Mark V series, which acts as an interface to connect the drive to the SCR power bridge. It is recommended to perform routine maintenance when the drive is taken offline to replace this board to keep the drive in good operating order.

Board Replacement and Cleaning: If the board is not performing as expected, it must be replaced as some parts are not repairable. When the drive is turned off, you can inspect the motor for dust and debris. Use a cleaning cloth and mild cleansers to clean the motor and all components, ensuring mild cleansers are used to prevent corrosion of connectors, connections, or solder points.

Cable Inspection: Inspect all wires and cables for damage, wear, or fraying. Tug on all cables to ensure they are securely attached and tighten any loose ones. Ensure cables meet torque tightening parameters by consulting the instructions found on a sticker on the drive.

Motor Checks: Manually spin the motor in both directions to ensure it spins freely. Use a wrench to tighten all bolts holding the motor in place.

Documentation: General information, including a functional description, application data, warranty renewal, and replacement information, can be found in the GEI-100161 Manual. This manual is helpful for gaining a broad understanding of the system and identifying jumpers, hardware, and connectors.