GE Service Manual

IS200BICLH1AFD

1. Description

IS200BICLH1AFD Technical Specifications

2. Specifications

Specification	Value
Original	**Manufacturer GE Industrial Control Systems**
Product	**Series Innovation Series**
Functional	**Part Number IS200BICLH1AFD**
Functional	**Abbreviation BICL**
Functional	**Description IGBT Drive/Source Bridge Interface Board**
PCB	**Coating Style Conformal Coating**
Functional	**Revision 1 A**
Functional	**Revision 2 F**
Artwork	**Revision D**
Instruction	**Manual GEI-100264**
About	**the IS200BICLH1AFD**
The	**IS200BICLH1AFD is a circuit board component made by General Electric as part of their Speedtronic Mark VI system Series specifically. The MKVI was designed by GE for the management of industrial steam or gas turbines and included Ethernet and DCS communications from a windows-based operating system. Like most Speedtronic systems of later iterations (Mark IV forward), the Mark VI is designed with triple-redundant modular protection capability for important controls like temperature, speed, overspeed, and vibration. The IS200BICLH1AFD functions as an IGBT Drive/Source Bridge Interface Board, providing an interface be**

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Hardware Tips and Specifications

While the primary intended functionality of the IS200BICLH1AFD is to act as an interface between Innovation Series main PCBs and personality interface PCBs; this Mark VI product does feature some bonus functions that may serve your automated industrial needs well. The IS200 BICL is capable of acting as an interface for panel and system fault strings, ambient and bridge temperature monitoring, and pulse width modulated speed control. All of these aforementioned functions are implemented through the use of an electronically programmable logic device or EPLD. This EPLD can be programmed from the main control boards central processing unit or CPU, and only during initial power-up or hard reset of the greater assembly. As a GE Industrial Systems product, this BICL component board plugs into a VME type rack using its P1 and P2 connectors, which are the only two connectors present on this particular board's base plate. The IS200BICLH1AFD has a 1024 bit serial memory device for board ID and revision information. The board is designed with four relays, four RTDs (for thermal detection,) as well as various integrated circuits, transistors, capacitors, and resistors. The board’s front baseplate connects to the greater drive assembly via two screw mounts and is considered blank; not featuring any labeling or LED indicators for fault determination. Beyond all of the technologically specialized interior components necessary to include with the IS200BICLH1AFD assembly, this drive component part offers a protective circuit board coating for basic PCB survivability. As designated by the "H1" group designation in this printed circuit board's part number, this PCB is protected by a layer of special conformal coating. While conformal circuit board coating is significantly thinner than its competitor in normal PCB coating, it is a much more uniform layer of coating that should cover every surface of the board in its entirety; unlike normal PCG coating.

Installation Tips and Specifications

Please note the IS200BICLH1AFD is designed to install in slot five of the drive assembly only and may be damaged if installed incorrectly. Do not insert or adjust board connections while the board is powered up, as this could damage the internal drive assembly greatly, or even worse, cause injury to the drive administrator. This part's manufacturer, GE Industrial Control Systems, heavily recommends the wearing of a ground strap during the entirety of the IS200BICLH1AFD component board's installation. As with any component board installation, it is crucial to test that the greater drive assembly lacks a lasting voltage, static or otherwise, before attempting to mount the BICL PCB in its VME slot. Before attempting to remove a defective BICL from its VME rack, the drive installer must remember to unseat the board from the assembly through the considerate raising of an ejector tab. The BICL Board Layout Diagram embedded below should be of some help, as it was sourced from the correct corresponding instructional manual GEI-100264. Our team at AX Control protects all static sensitive products with anti-static bags to protect from damage during shipment.