GE Service Manual

IS200STAIH2ABA

1. Description

IS200STAIH2ABA Technical Specifications

2. Specifications

Specification	Value
Part	**Number IS200STAIH2ABA**
Manufacturer	**GE Energy**
Series	**Mark VIe**
Functional	**Acronym STAI**
Functional	**Description Simplex Terminal Analog Input**
PCB	**Coating Conformal Coating**
Functional	**Revision 1 A**
Functional	**Revision 2 B**
Artwork	**Revision A**
Shipping	**Weight 4.19 lb**

3. Product Information

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Manufacturer GE Energy

Series Mark VIe

Functional Acronym STAI

Functional Description Simplex Terminal Analog Input

PCB Coating Conformal Coating

Functional Revision 1 A

Functional Revision 2 B

Artwork Revision A

Shipping Weight 4.19 lb

About the IS200STAIH2ABA

Model Name: IS200STAIH2ABA.

Original Manufacturer: General Electric (GE), under GE Energy.

Series: Part of the Mark VIe Wind Turbine Control System Series.

Functional Description: Simplex Terminal Analog Input (STAI).

Revisions: Modified from its parent product (IS200STAIH2) through three significant product revisions, rated A, B, and A respectively.

Hardware Tips and Specifications

Primary Application: Provides terminal board circuitry for 10 analog inputs and two analog outputs.

Interface: Interfaces with the special-assembly Mark VIe PAIC pack.

Terminal Blocks: Utilizes a series of plug-in terminals (not safety certified).

Described as high-density Euro-block style terminal blocks.

Compatibility:

Compatible with the primary Mark VIe control system.

PCB Protection: All hardware components are protected beneath a thin layer of chemically-applied conformal-style printed circuit board protective coating.

Information Basis: Hardware-specifying product information is based on instructional manual materials surrounding its original, unrevised IS200STAIH2 parent PCB.

Specifications

* **Part Number:** IS200STAIH2ABA
* **Manufacturer:** General Electric
* **Series:** Mark VIe
* **Product Type:** Simplex Analog Input Terminal Board
* **Number of Channels:** 12
* **Maximum Lead Resistance:** 15 Ω
* **Outputs:** 24 V DC
* **Size:** 15.9 cm high x 10.2 cm wide
* **Operating Temperature:** -30 to +65 °C
* **Technology:** Surface mount
* **Repair:** 3-7 Days
* **Country of Origin:** USA
* **Availability:** In Stock
* **Manual:** GEH-6721L

Functional Description

The IS200STAIH2ABA is a compact Simplex Analog Input (STAI) terminal board designed for Mark VIe distributed control systems. It features 10 analog inputs and 2 analog outputs, connecting to the PAIC pack. The board utilizes high-density Euro-block terminal blocks and includes an on-board ID chip for system diagnostics. The PAIC I/O pack plugs into the D-type connector and communicates via Ethernet, supporting only simplex systems.

Installation

* The STAI board can be mounted on a DIN-rail using a sheet metal carrier with a plastic insulator or fastened directly to a cabinet via a sheet metal assembly.
* Typically, #18 AWG shielded twisted pair wires are used, and an I/O cable shield terminal is available near the terminal blocks.
* Supported input and output types include:
* Two-wire, three-wire, four-wire, or externally powered transmitters with analog input.
* 5 V and 10 V DC analog input.
* 0-20 mA current analog output.
* 0-200 mA current analog output.

Operation

* The terminal board provides a 24 V DC power supply for transmitters and transducers.
* Users can select between current or voltage inputs via jumper settings.
* Two analog output circuits are available: one is fixed at 4-20 mA, while the other can be configured via jumpers for 4-20 mA or 0-200 mA.
* Due to its single cable connection, this board is unsuitable for TMR (Triple Modular Redundancy) applications.

Diagnostics

* Output current is measured by voltage drop across a series resistor on the board, and the I/O processor generates an alarm if outputs become unhealthy.

* The I/O controller queries each ID device available on the cable connectors.

* The ID device is a read-only chip that encodes the board’s serial number, type, revision number, and connector placement; a mismatch with the I/O controller results in a hardware incompatibility fault.

Configuration

Jumpers are used to configure the terminal board as follows:

* **J1A through J8A:** Used to choose between current or voltage input.

* **J1B through J8B:** Determine if the return is linked to common or left open.

* **J9A and J10A:** Used to choose input current between 1 mA and 20 mA.

* **J9B and J10B:** Determine if the return is linked to common or left open.

* **J0:** Used to adjust Output 1 to 20 mA or 200 mA.