GE Service Manual

IS200JPDHG1AAA

1. Description

Technical Specifications

2. Specifications

Specification	Value
Product	**Name: IS200JPDHG1A**
Unit	**Manufacture: GE Industrial**
Family	**Name: Mark VI IS200**
Product	**Function: High Density Power Distribution Module**
Supply	**Voltage: 28VDC**
Supported	**I/O Packs: ≤24**
Supported	**Ethernet Switches: 3**
Application	**Type: TMR**
Size:	**15.875cm x 10.795cm**
Manual	**Number: GEH-6721L**
Alphanumeric	**Catalog Number IS200JPDHG1AAA**
Female	**Plug Connector Quantity 29**
Functional	**Acronym/Abbreviation JPDH**
Functional	**Description High-Density Power Distribution**
Hazardous	**Location Capability Yes, according to GEH-6725R Instruction Guide**
Mounting	**DIN-Rail Card Carrier**
Nominal	**Electrical Rating 24/28 VDC**
Number	**of 6-Pin Plug Connectors 2**
Temperature	**Range -30 to 65 °C**
Unit	**of Power Measurement Volts of Direct Current**

3. Product Information

Technical Specifications

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Family Name: Mark VI IS200

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About the IS200JPDHG1AAA

The IS200JPDHG1AAA model is marketed as a High-Density Power Distribution Card which is typically used in the Mark VI Turbine Control System Series of trusted automated industrial retailer General Electric. The Mark VI Series that this IS200JPDHG1AAA Power Distribution Card belongs to has to be described as a relatively mysterious General Electric product series, given the fact that its originally-developed instructional manual materials are constantly being removed online due to this IS200JPDHG1AAA Power Distribution Card's copyright status. This IS200JPDHG1AAA printed circuit board product offering's greater Mark VI Turbine Control System Series is something of a relatively self-describable GE Mark product series, given the fact that it has specific intended applications in wind, gas, and steam turbine control and management systems. This IS200JPDHG1AAA product's greater Mark VI Series is additionally considered the hot prospect on the greater automated industrial marketplace given the fact that it is one of the lastly-developed GE Mark product series to make use of the patented Speedtronic control system series.

Hardware Tips and Specifications

When this unit is being operated it can issue twenty-eight volts of direct current to up to three Ethernet switches as well as twenty-four Mark VIe I/O packs. If desired more JPDH packs can be purchased and then connected together to provide even more power to the I/O packs. Please note that when connecting more JPDH cards together they must be connected in a daisy-chain arrangement. As detailed in the various IS200JPDHG1AAA instructional manual materials made available above, this IS200JPDHG1AAA product is pertinent to several crucial Mark VI Series applications with other Mark VI Series products, chiefly including the IS210SAMBH1A board, which utilizes this JPDH-abbreviated product for all of its powering purposes. The same can be said of the IS42yPDASH1A and IS42yYDASS1A printed circuit board modular assembly product offerings from General Electric, which may additionally be available for both repair and replacement within our extended new and reconditioned inventory of General Electric products. A final compatible product designation the IS200JPDHG1AAA Board here may exist as one of six being fed by a JPDS-labeled circuit board also belonging to the Mark VI. This IS200JPDHG1AAA device is additionally in possession of the IS200JPDHG1AAA functional product number that indirectly highlights a number of relevant IS200JPDHG1AAA Board details including its:

JPDH functional product abbreviation

Normal PCB coating style

Group one Mark VI Series product grouping

Three-fold revision history

The physical components of this board are twenty-nine female pin plug connectors. Of these twenty-nine two are six-pins while the remaining twenty-seven connectors are two-pin connectors; twenty-four of the connectors are in three rows of eight. The connectors in these rows are labeled JT1 through JT8, JR1 through JR8, and JS1 through JS8. These rows are the feeds in which the primary or main power will be provided to the independent I/O packs. The I/O packs circuits will include a temperature coefficient fuse device, this fuse deceive will be used for branch circuit protection as well as provide a positive temperature fuse. There are numerous hazardous locations in which the IS200JPDHG1AAA board can be used. The primary locations where this board can be used are ATEX Zone 2 Group IIC, Class I Division 2 Groups A through D, and Class I Zone 2 Group IIC. This board can also be used in non-hazardous locations the certification code for use in non-hazardous locations is ULE207685. If more information regarding the IS200JPDHG1AAA board is required please refer to the two GE Manuals which are available under the manuals tab. The GEH-6725 Mark VIe and Mark VIeS Controls Equipment HazLoc manual provides information regarding location certifications.

Specifications

* **Part No.:** IS200JPDHG1AAA
* **Manufacturer:** General Electric
* **Country of Manufacture:** United States of America (USA)
* **Temperature:** -30 to 65°C
* **Board Size:** 15.875 cm high x 10.795 cm wide
* **Mounting:** DIN-Rail
* **Product Type:** High Density Power Distribution Board

* **Availability:** In Stock

* **Series:** Mark VIe

Functional Description

The IS200JPDHG1AAA is a High Density Power Distribution (JPDH) board developed by GE for the Mark VIe control system. It facilitates the distribution of 28 V DC power from a single source to 24 Mark VIe I/O packs and 3 Ethernet switches.

Features

* **Daisy-chain Configuration:** Multiple boards can be interconnected to expand power distribution to additional I/O packs for larger systems.

* **Circuit Protection:** Each I/O pack connector circuit is equipped with a positive temperature coefficient (PTC) fuse device. These devices automatically limit current flow during overcurrent conditions to protect the connected I/O packs and the power distribution system.

Installation

* **Mounting:** Select a suitable vertical surface and secure the board using #6 machine screws through the mounting holes at each corner.

* **Connector Placement:** Insert Mate-N-Lok connectors into the appropriate slots.

* **Ratings:** The 6-pin and larger 2-pin connectors are rated for 600 V and 13 A. Smaller 2-pin connectors are rated for 600 V with a maximum current limited by a 0.8 A fuse. Caution should be exercised to not exceed these ratings.

Safety Standards Compliance

* **UL 508A:** Meets safety requirements for industrial control panels, covering electrical hazards, component selection, wiring, grounding, and construction.

* **CSA 22.2 No. 14:** Adheres to standards for industrial control equipment to prevent electrical hazards, covering insulation, ratings, and environmental conditions.

* **EN 61010-1:** Conforms to low voltage directive safety requirements for industrial machinery, covering electric shock protection, insulation, temperature limits, and mechanical strength.

Inputs and Outputs

* **Inputs:** The system features one 6-pin Mate-N-Lok connection for the 28 V DC power input, rated for up to 600 V and 13 A.

* **Outputs:**

* There are three 2-pin Mate-N-Lok connections for Ethernet switches, rated for up to 600 V and 13 A.

* There are twenty-four 2-pin Mate-N-Lok connections for I/O packs, rated for up to 600 V and 0.8 A.