GE Genius I-O Series Service Manual

IC660BSM120

1. Description

The IC660BSM120 is a Genius I/O system Bus Switching module used to link I/O devices to two serial buses simultaneously. IC660BSM120 exists in two variations: the 115 VAC/125 VDC BSM catalogued as IC660BSM120 and the 24/48 VDC BSM catalogued as IC660BSM021. IC660BSM120 BSM links up to eight discrete analog blocks to a dual bus. However, when additional BSMs are used, up to 30 I/O blocks can interface with the same dual bus. In case of a bus failure, this dual bus configuration is used to offer a

2. Specifications

Specification	Value
Brand	**GE Fanuc**
Series	**Genius I-O**
Part	**Number IC660BSM120**
Description	**Genius I/O Bus Switching Module**
Application	**Genius I/O Serial Bus**
Operating	**Voltage 90 to 130 Volts AC/95 to 150 Volts DC**
Max	**Current Draw 60 milliamps at 115 Volts AC and 12 milliamps at 120 Volts DC**
I/O	**Capacity 8**
Operating	**Temperature Range 0 to 60 Degrees Celsius**
Approximate	**Dimension 3.5 x 2.3 x 2.5 Inches**
Configuration	**Handheld Monitor and CPU configuration**
Serial	**Bus Connectors 2**
Minimum	**Reliability Rating 500,000 Operations Description**
The	**GE Fanuc IC660BSM120 Genius I/O Bus Switching Module is a simple and reliable module that can be used to connects the Genius I/O blocks to 2 serial busses simultaneously. Unlike its counterpart the IC660BSM021 Switching Module, the IC660BSM120 Switching Module is AC/DC powered and it is suitable for AC supported I/O blocks. The IC660BSM120 Switching Module is designed to connect to up to 8 I/O blocks on the same dual serial bus and wiring additional IC660BSM120 Modules can**

3. Product Information

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The IC660BSM120 Bus Switching Module uses a phase B discrete block in the cluster to control all major operations. The first circuit of this discrete block is an output devoted to the IC660BSM120 BSM. This output allows the IC660BSM120 BSM to switch buses if communications are lost on the current bus. If one switch of a BSM cannot trace an active bus, the BSM has to wait until the connected bus communication is reestablished. This cuts interchanging by the BSM when no communication is available. The now de-energized IC660BSM120BSM connects the blocks to bus A. IC660BSM120BSM is energized only when a selection of bus B is required. An LED on the BSM only lights up when bus B is active. IC660BSM120 can be commanded to switch buses by either the CPU or a handheld monitor.

Note: IC660BSM120 and IC660BSM021 are identical in every aspect apart from the power source. IC660BSM021 is powered by 24/48 VDC, while IC660BSM120 is powered by 115 VAC/I25 VDC. The GE Fanuc IC660BSM120 Genius I/O Bus Switching Module is made for the Genius I/O Bus System. This module has 2 serial connectors and it can accommodate up to 8 I/O blocks on the same dual serial bus. Technical specifications for IC660BSM120

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Series Genius I-O

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Application Genius I/O Serial Bus

Operating Voltage 90 to 130 Volts AC/95 to 150 Volts DC

Max Current Draw 60 milliamps at 115 Volts AC and 12 milliamps at 120 Volts DC

I/O Capacity 8

Operating Temperature Range 0 to 60 Degrees Celsius

Approximate Dimension 3.5 x 2.3 x 2.5 Inches

Configuration Handheld Monitor and CPU configuration

Serial Bus Connectors 2

Minimum Reliability Rating 500,000 Operations Description

The GE Fanuc IC660BSM120 Genius I/O Bus Switching Module is a simple and reliable module that can be used to connects the Genius I/O blocks to 2 serial busses simultaneously. Unlike its counterpart the IC660BSM021 Switching Module, the IC660BSM120 Switching Module is AC/DC powered and it is suitable for AC supported I/O blocks. The IC660BSM120 Switching Module is designed to connect to up to 8 I/O blocks on the same dual serial bus and wiring additional IC660BSM120 Modules can increase the Genius I/O block connection to up to 30 blocks on the same dual bus. A properly configured dual bus configuration not only connects the I/O block to the serial bus, but it also stores the communication path in the event that the bus fails. The IC660BSM120 Switching Module’s operation is controlled by a Phase B discrete block in the cluster connection. During operation, the first circuit on this I/O block can be configured as a dedicated output for the bus switching module.

The GE Fanuc IC660BSM120 Switching Module is configured by using a Genius handheld monitor (HHM) or through the CPU programming, and it can also be used to switch between busses. When Bus B is selected, the IC660BSM120 Switching Module has operating voltage ranges of 90 to 130 Volts AC and 95 to 150 Volts DC. When Bus A is active, it has an operating voltage rating of less than 65 Volts AC/DC, and a maximum current draw of 60 milliamps at 115 Volts AC and a maximum draw of 12 milliamps at 120 Volts DC. The IC660BSM120 Switching Module has a reliability rating of up to 500,000 operations (minimum) and a maximum activation time of fewer than 20 milliseconds. The IC660BSM120 Switching Module has an operating temperature range of 0 to 60 degrees Celsius and approximate mounting dimensions of 3.5 x 2.3 x 2.5 inches.