GE Series 90-30 Series Service Manual

IC693BEM331

1. Description

The IC693BEM331 is a Genius Bus Controller. This device is manufactured by GE Fanuc that is part of the Series 90-30 Programmable Logic Controller (PLC) product family. This Bus Controller Module is used to interface Series 90-30 PLC and existing Genius I/O Serial bus. It is capable of transmitting and receiving up to 128 Bytes of data and communicate up to 31 devices residing on the same I/O

2. Specifications

Specification	Value
Brand	**GE Fanuc**
Series	**Series 90-30**
Part	**Number IC693BEM331**
Current	**consumption <300mA at +5V DC**
Number	**of LEDs 2 (OK and COMM OK)**
Power	**Supply 5 V DC from the Series 90-30 Backplane**
Module	**Type Genius Bus Interface**
Compatible	**Systems IC693CPU311K, 321K, 331L or later, or any version of the IC693CPU313, 323, 340, 341, 350, 351, 352, 360, 363, and 364.**
Compatible	**Series 90-30 controllers IC693CPU311K, 321K, 331L or later, or any version of the IC693CPU313, 323, 340, 341, 350, 351, 352, 360, 363, and 364. The CPU**
Compatible	**Series 6 controllers IC660CBB902F/903F**
Type	**of component Genius Bus Interface for Series 90-30 PLC**
Number	**of I/Os 31 Maximum**
Maximum	**Data Rate 128 bytes**
IP	**rating IP 20**
The	**IC693BEM331 is a Bus Controller Module that is part of the GE Sires 90-30 Programmable Logic Controller (PLC) product family. This module is manufactured by GE Fanuc Automation, for interfacing a Series 90-30 PLC to the proprietary Genius I/O bus. This bus controller module is capable of communicati**

3. Product Information

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Technical specifications for IC693BEM331

Brand GE Fanuc

Series Series 90-30

Part Number IC693BEM331

Current consumption <300mA at +5V DC

Number of LEDs 2 (OK and COMM OK)

Power Supply 5 V DC from the Series 90-30 Backplane

Module Type Genius Bus Interface

Compatible Systems IC693CPU311K, 321K, 331L or later, or any version of the IC693CPU313, 323, 340, 341, 350, 351, 352, 360, 363, and 364.

Compatible Series 90-30 controllers IC693CPU311K, 321K, 331L or later, or any version of the IC693CPU313, 323, 340, 341, 350, 351, 352, 360, 363, and 364. The CPU

Compatible Series 6 controllers IC660CBB902F/903F

Type of component Genius Bus Interface for Series 90-30 PLC

Number of I/Os 31 Maximum

Maximum Data Rate 128 bytes

IP rating IP 20

The IC693BEM331 is a Bus Controller Module that is part of the GE Sires 90-30 Programmable Logic Controller (PLC) product family. This module is manufactured by GE Fanuc Automation, for interfacing a Series 90-30 PLC to the proprietary Genius I/O bus. This bus controller module is capable of communicating with Genius blocks such as discrete, analog, and special purpose field devices. It also supports communication with Remote I/O drops consisting of Series 90-70 I/O racks connected via Remote I/O scanner modules, Field control I/O station via Bus interface unit wherein up to Eight (8) additional field control modules is supported, Genius Hand-Held Monitor, and a variety of Hosts.

A Series 90-30 PLC system may be installed with up to Eight (8) Genius Bus Controllers or enhanced Genius Communications Modules. The achieve this configuration, the required firmware of the Series 90-30 PLC is Firmware 5.0 or later.

The IC693BEM331 is equipped with a variety of Status LEDs installed on the module’s front panel. These LEDs include OK and COM LED. The normal operation of the OK LED is steady on-state. This LED remains ON after power-up diagnostics are completed. The COM LED is steadily ON when the bus controller module is actively communicating and blinks for intermittent bus connection and error.

Compatible Series 90-30 PLC for use with the IC693BEM331 Bus Controller are IC693CPU311K, 321K, 331L or later and any version of the IC693CPU313, 323, 340, 341, 350, 351, 352, 360, 363, and 364. Required firmware for use is version 5.0 or later.

The GE Fanuc IC693BEM331 Bus Controller is able to handle a maximum of 128 bytes of incoming and outgoing data from the field devices on the Bus. The configuration of the GE Fanuc IC693BEM331 Bus Controller is done through an additional proprietary GE Fanuc handheld monitor. Some of the I/O device types that can send and receive data to a Series 90-30 PLC that is using the GE Fanuc IC693BEM331 Bus Controller as a communication interface include discrete I/O devices such as solenoid valves, motor starters, and limit switches or analog I/O devices such as pressure transmitters and temperature sensors. The manufacturer recommends mounting the GE Fanuc IC693BEM331 Bus Controller inside a protective enclosure in order to avoid direct contact with water, excess humidity, and extreme high and low extremes of temperatures. Any work requiring maintenance on the circuitry should be carried out only by qualified personnel, because the mishandling of the equipment or the incorrect connection of any its wiring can produce application process malfunctions, property damage, or serious injury.