GE Series 90-70 Series Service Manual

IC697BEM733

1. Description

The IC697BEM733 is a Remote I/O scanner module that is part of the Series 90-70 Programmable Logic Controller (PAC) series formerly manufactured by GE Fanuc Automation, now under Emerson Automation. This module is a Remote I/O scanner that is provided with One 15-pin RS-422/485 compatible serial port, and One (1) 9-pin IC66* Hand-held Monitor port. It also has an IC66* Bus terminal

2. Specifications

Specification	Value
Brand	**GE Fanuc**
Series	**Series 90-70**
Manufacturer	**Manufacturer**
Product	**Description Remote I/O scanner**
Part	**Number IC697BEM733**
Series	**Series 90-70**
Slot	**width Single slot**
Description	**Genius Remote I/O Scanner**
Part	**Number IC697BEM733**
Status	**LED indicators Module OK; I/O Enabled; Bus B Active;**
Application	**GE fanuc IC66 Bus**
Product	**Description IC697BEM733**
No.	**of Ports One 15-pin RS-422/485 compatible serial port; One (1) 9-pin IC66* Hand-held Monitor port; One IC66* Bus terminal**
Operating	**Voltage 5.0 Volts DC**
Description	**Genius Remote I/O Scanner**
Supported	**Data Rates: data rates are 153.6K baud extended Up to 20 fully-loaded drops, or up to 30 drops if not fully-loaded; 153.6K baud extended Up to 20 fully-loaded drops, or up to 30 drops if not fully-loaded and 76.8K baud Up to 10 fully-loaded drops, or up to 30 drops if not fully-loaded**
Backplane	**Current 1.3 Amps**
Maximum	**no. of drop station Up to 32 devices**
No.	**of devices per bus 32 devices at 153.6 Kbaud standard, 153.6 Kbaud extended, or 76**

3. Product Information

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Technical specifications for IC697BEM733

Brand GE Fanuc

Series Series 90-70

Manufacturer Manufacturer

Product Description Remote I/O scanner

Part Number IC697BEM733

Series Series 90-70

Slot width Single slot

Description Genius Remote I/O Scanner

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Status LED indicators Module OK; I/O Enabled; Bus B Active;

Application GE fanuc IC66 Bus

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Operating Voltage 5.0 Volts DC

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Backplane Current 1.3 Amps

Maximum no. of drop station Up to 32 devices

No. of devices per bus 32 devices at 153.6 Kbaud standard, 153.6 Kbaud extended, or 76.8 Kbaud. 16 devices at 38.4 Kbaud. Includes bus controller and Handheld Monitor

I/O Capacity 1024 Discrete I/O or 64 Analog I/O

Transmission speed 153.6 Kbaud standardard and extended; 76.8 Kbaud; 38.4 Kbaud

Bus Topology Daisy-chained bus cable; single twisted pair plus shield or Twinax

Location IC697 PLC rack

Terminating Resistor values 75, 100, 120 or 150 Ohms

Maximum Bus Length 7500 feet (2275 meters) at 38.4 Kbaud, 4500 feet (1365 meters) at 76.8 Kbaud, 3500 feet (1060 meters) at 153.6 Kbaud extended, 2000 feet 605 meters) at 153.6 Kbaud, standard

Connectors RS-422/RS-485 Serial Port and a 9-Pin Hand Held Monitor Connector

Application GE fanuc IC66 Bus

Bus termination 75, 100, 120, or 150 ohm resistor at both ends of electrical bus cable.

LED Indicators 3 LEDs

Backplane Current 1.3 Amps

Location IC697 PLC rack

Backplane current consumption: 800mA at 5VDC

Average Weight 2.0 Pounds

Connectors RS-422/RS-485 Serial Port and a 9-Pin Hand Held Monitor Connector

Product Lifecyle: Discontinued

LED Indicators Module OK; I/O Enables; Bus Active

Current draw 0.8 A

The IC697BEM733 is a communication interface module from the Series 90-7 Programmable Logic Controller (PLC) Series, produced formerly by GE Fanuc now under Emerson Automation. This module is specifically a Remote I/O scanner, primarily used to implement distributed I/O architecture. This module allows the installation of remote I/O stations which can be located up to 7500 feet or 2275 meters from the host controller. It can be configured to handle any combination of discrete I/O and analog I/O up to a maximum quantity of 1024 Discrete inputs, 1024 Discrete outputs, 64 Analog input words, and 64 analog output words. A remote I/O station that is being communicated with the IC697BEM733 Remote I/O scanner module may contain instances of IC697 discrete modules, analog modules, and analog expander modules. Bus Transmitter, Bus Receiver, PCM, and ADS modules. This module is recommended for use with IC697 modules however, IC66* modules, 3rd party PLCs, and computers installed with Remote I/O communication cards may be used with the IC697BEM733 module. The IC697BEM733 has One 15-pin RS-422/485 compatible serial port, and One (1) 9-pin IC66* Hand-held Monitor port. It also has dedicated IC66* Bus terminals which supports redundancy. This module is compatible for use with version 4.0 or later Hand Held Monitor with catalog number IC660HHM501G; CPU firmware release 2.0 or later, MS-DOS programming software release 3.0 or later, Bus Controller release 3.0 or later if used with an IC697 PLC modules; CPU rev. 105 or later, MS-DOS programming software release 4.02 or later, Bus Controllers with catalog number IC660CBB902 or 903 must be version 1.7 or later if used with IC600 PLC system; CPU rev. 4.0 or later, MS-DOS programming software release 2.01 or later, any version Bus Controller if used with IC655 PLC. For computer communication, it must be installed with PCIM or QBIM card.

The IC697BEM733 Series 90-70 Genius Remote I/O Scanner Module from the GE Fanuc system. This module is installed on a remote IC697 PLC rack, and it provides an interface between the IC697 I/O modules and the IC66 Bus. Although the IC697BEM733 Module is designed for the IC697 system, it is also compatible with every IC66 host, including the IC660 Programmable Logic Controllers, IC655 Programmable Logic Controllers, and host computers fitted with a Personal Computer Interface Module (PCIM), a Q-bus Interface Module (QBIM), or other third-party GENI-based interfaces. The IC697BEM733 Module can support a mix of IC697 analog/discrete modules with up to 1024 discrete I/O or 64 analog I/O, and PCM and ADS devices. It also supports Bus transmitters, PCMs, ADS, and analog expander modules The IC697BEM733 Remote I/O Scanner Module can support a maximum connection

distance of 2275 meters (7,500 feet) from the host controller. A complete connection of the IC697BEM733 Remote I/O Scanner Module and the IC697 modules make up the remote drop system. A typical remote drop consists of up to 8 PLC racks that can be either 5-slot or 9-slot IC697 racks linked together by a bus transmitter and bus receiver modules over a maximum remote connection distance of 15 meters (50 feet). The IC697BEM733 Remote I/O Scanner Module has 3 LED indicators that show the module's operation status. It comes with a 9-pin connector (male, D-type) on the upper rear-end for connecting to an IC66 genius handheld monitor, an RS-422/RS-485 serial port for connecting to a multidrop communications network or serial programmer, and 16 IC66 Bus terminals.