GE Series 90-30 Series Service Manual

IC693CMM311

1. Description

The IC693CMM311 is a communication coprocessor module that is part of the Series 90-30 Programmable Logic Controller (PAC) series formerly manufactured by GE Fanuc Automation, now under Emerson Automation. This module has two (2) communication ports, with port 1 configurable as Rs232 and Port 2 configurable as RS232 / RS422 and RS485 electrical standards. This module supports CCM, RTU, and SNP communication protocols.

2. Specifications

Specification	Value
Manufacturer	**GE Fanuc**
Series	**Series 90-30**
Product	**Description Communication Coprocessor Module (CCM)**
Manufacturer	**GE Fanuc / Emerson Automation**
Part	**Number IC693CMM311**
Communication	**interfaces Port 1: RS232 Port 2: Rs232 / RS485**
Series	**Series 90-30**
Product	**Type Communications Coprocessor Module**
Communication	**cable: IC693CBL305 Wye cable**
Part	**Number IC693CMM311**
Compatible	**Devices Modular GE Series 90-30 CPUs**
Supported	**Protocol: SNP, Modbus RTU; CMM**
Product	**Description Genius communication module**
Embedded	**CPUs Not Compatible**
No.	**of CMM modules: Four (4) modules**
Slot	**width Single slot**
Number	**of Serial Ports 2**
Module	**width: Single slot**
Slot	**assignment Any slot except CPU slot**
RS-232	**Applications Supported**
Mounting	**Baseplate mounted**
Mounting	**location Series 90-30 CPU baseplate**
RS-485	**Applications Supported (Port 2 only)**
Module	**Location CPU baseplate only**
Status	**LED indicators Module OK; PORT1; PORT2**
LED	**indicators: Module OK; US1; US2**
Connection	**standard: Port 1: RS232 Port 2: RS232 / RS422**

3. Product Information

The IC693CMM311 is a communication coprocessor module that is part of the Series 90-30 Programmable Logic Controller (PAC) series formerly manufactured by GE Fanuc Automation, now under Emerson Automation. This module has two (2) communication ports, with port 1 configurable as Rs232 and Port 2 configurable as RS232 / RS422 and RS485 electrical standards. This module supports CCM, RTU, and SNP communication protocols.

Technical specifications for IC693CMM311

Manufacturer GE Fanuc

Series Series 90-30

Product Description Communication Coprocessor Module (CCM)

Manufacturer GE Fanuc / Emerson Automation

Part Number IC693CMM311

Communication interfaces Port 1: RS232 Port 2: Rs232 / RS485

Series Series 90-30

Product Type Communications Coprocessor Module

Communication cable: IC693CBL305 Wye cable

Part Number IC693CMM311

Compatible Devices Modular GE Series 90-30 CPUs

Supported Protocol: SNP, Modbus RTU; CMM

Product Description Genius communication module

Embedded CPUs Not Compatible

No. of CMM modules: Four (4) modules

Slot width Single slot

Number of Serial Ports 2

Module width: Single slot

Slot assignment Any slot except CPU slot

RS-232 Applications Supported

Mounting Baseplate mounted

Mounting location Series 90-30 CPU baseplate

RS-485 Applications Supported (Port 2 only)

Module Location CPU baseplate only

Status LED indicators Module OK; PORT1; PORT2

LED indicators: Module OK; US1; US2

Connection standard: Port 1: RS232 Port 2: RS232 / RS422/RS485

Product Lifecycle Status* Discontinued/Obsolete

Current load: 400 mA

Port connections 25-pin D-shell, female ports

Bus voltage: +5VDC

Supported protocols: CCM / RTU / SNP

Communication speed 300, 600, 1200, 240, 4800, 9600 and 19200 Baud rate

Pre-assembled cable IC693CBL305

No. of CMM module per baseplate 4

Backplane current draw 400 mA at 5VDC

The IC693CMM311 is a communications coprocessor module from the Series 90-30 PLC platform. This series of PLC particularly the IC693CMM311 is formerly manufactured by GE Fanuc however, recently acquired by Emerson Automation. This module provides CCM, Remote Terminal Unit (RTU), and SNP connectivity to any controller that hosts the module. Specifically, the IC693CMM311 is compatible for use with modular Series 90-30 CPUs. The IC693CMM311 comes with Two (2) communication interfaces such as Port 1 supporting RS232 standard and Port 2 supporting RS232 / RS422 and RS485 electrical standards. Each port is a 25-pin D-shell interface. This module is provided with a push to restart the communication button to re-initiate communication without restarting the entire module. The IC693CMM311 ports are configurable for a variety of protocol combinations such as CCM protocol on both ports; CCM protocol on port 1, RTU protocol on port 2; RTU protocol on port 1, CCM protocol on port 2; RTU protocol on both ports; SNP and SNP-X protocols on both ports; SNP and SNP-X protocols on port 1, CCM protocol on port 2; CCM protocol on port 1, SNP and SNP-X protocols on port 2; SNP and SNP-X protocols on port 1, RTU protocol on port 2; RTU protocol on port 1, SNP and SNP-X protocols on port 2. Supported transmission speeds for CCM, SNP, and RTU are 300, 600, 1200, 240, 4800, 9600, and 19200 Baud rate. Compatible pre-assembled cable is the Wye connection cable with catalog number IC693CBL305. This module comes with MODULE OK, PORT 1 and PORT 2 tatus LED indicators for determining the module’s state of operation.

The IC693CMM311 module is part of the Series 90-30 by GE Fanuc as a CCM or Communications Coprocessor Module. It is designed to be a high-performance device. The GE Fanuc Series 90-30 IC693CMM311 communications coprocessor module is compatible with all of the modular CPUs in the GE Series 90-30 product line, but it cannot be used with any of the embedded GE Series 90-30 CPUs such as the 311, 313, or 323 embedded GE CPUs. Any GE Fanuc Series 90-30 PLC with a modular CPU will benefit from the installation of the GE IC693CMM311 communications coprocessor module and all of its features and functions. The protocols that this communications coprocessor module can support are the SNP protocol, the Modbus or RTU slave communications protocol, and the GE Fanuc CCM communications protocol. The GE Fanuc Series 90-30 IC693CMM311 communications coprocessor module has 2 built-in serial ports known as Port 1 and Port 2. The applications supported by Port 1 are RS-232 applications and the applications supported by Port 2 are RS-232 applications and RS-485 applications. Both of the ports are wired to the IC693CMM311 communications coprocessor module’s one and only connector, which can make wiring the module difficult, but the module comes with a GE Wye cable known as the IC693CBL305 Wye cable that technicians can use to separate the 2 ports and make wiring the module easier. The module can be configured with a default setup or with configuration software. Certain CPUs (models 331 and later) can support up to 4 of these communications

coprocessor modules at a time in their CPU baseplates.