GE IC693CPU374

GE Fanuc 90-30 PLC CPU 374 Module

Model: IC693CPU374 Instruction Manual

1. Introduction

This manual provides essential information for the installation, operation, and maintenance of the GE Fanuc 90-30 PLC CPU 374 Module (IC693CPU374). The CPU 374 is a high-performance central processing unit designed for the GE Fanuc Series 90-30 Programmable Logic Controller system, offering advanced control capabilities for industrial automation applications.

It is crucial to read and understand all instructions before attempting to install or operate the module to ensure safe and efficient performance.

This image displays a central GE Fanuc Series 90-30 Programmable Logic Controller (PLC) system, surrounded by stacks of individual GE Fanuc modules in clear protective packaging. The central PLC unit shows various ports and indicators, while the stacked modules are labeled with model numbers such as IC693MDL740G, IC693MDL733E, IC693MDL732E, IC693MDL646F, IC693MDL730J, IC693ALG442-DA, IC693ALG390F, IC693MDL655K, IC693CMM321-JJ, IC693MDL230C, IC693CPU351-GP, and IC693DSM314-BE, indicating a range of input/output, analog, and communication modules.

2. Setup and Installation

The IC693CPU374 module is designed for installation into a GE Fanuc Series 90-30 PLC rack. Proper installation is critical for system integrity and performance.

1. **Power Off:** Ensure all power to the PLC rack and associated equipment is disconnected before installation.
2. **Module Insertion:** Carefully align the CPU module with an available slot in the PLC rack. Apply even pressure to fully seat the module into the backplane connector.
3. **Securing the Module:** Use the retaining screws or clips, if present, to secure the module firmly in its slot.
4. **Wiring Connections:** Connect necessary communication cables (e.g., Ethernet, serial) to the appropriate ports on the CPU module. Refer to the system wiring diagrams for specific connection details.
5. **Power On:** After verifying all connections are secure, restore power to the PLC system. Observe the status indicators on the CPU module.

For detailed information on rack assembly, power supply installation, and system grounding, consult the main GE Fanuc Series 90-30 PLC System Manual.

3. Operating Instructions

The CPU 374 module executes the user-defined control program to manage industrial processes. Operation typically involves programming, mode selection, and monitoring.

- **Programming:** The CPU module is programmed using GE Fanuc's programming software (e.g., LogicMaster 90-30 or VersaPro) via a connected PC. The program is downloaded to the CPU's memory.
- **Operating Modes:** The CPU typically supports various operating modes, such as RUN, STOP, and PROGRAM. These modes are usually selected via a switch on the module or through the programming software.
    - *RUN Mode:* The CPU executes the loaded program and controls the connected I/O.
    - *STOP Mode:* The CPU halts program execution, allowing for program modifications or troubleshooting.
    - *PROGRAM Mode:* Used for downloading, uploading, or modifying the control program.
- **Status Indicators:** LEDs on the front panel provide visual feedback on the module's status (e.g., RUN, STOP, FAULT, I/O activity, communication status). Refer to the module's label for specific LED functions.

Always ensure the CPU is in STOP mode before making significant program changes or hardware modifications to prevent unintended machine operation.

4. Maintenance

Routine maintenance helps ensure the longevity and reliable operation of the IC693CPU374 module.

- **Visual Inspection:** Periodically inspect the module for any signs of physical damage, loose connections, or excessive dust accumulation.
- **Cleaning:** If necessary, gently clean the module's exterior with a soft, dry, lint-free cloth. Do not use liquid cleaners or solvents. Ensure power is off before cleaning.
- **Environmental Control:** Maintain the operating environment within specified temperature and

humidity ranges to prevent component stress. Ensure proper ventilation around the PLC rack.

- **Battery Replacement (if applicable):** Some CPU modules contain a battery to retain memory during power loss. If the CPU 374 has a battery, monitor its status (often indicated by an LED) and replace it according to manufacturer guidelines to prevent data loss. Refer to the specific battery replacement procedure in the detailed product manual.

Always power down the system before performing any maintenance that requires handling the module or its connections.

5. Troubleshooting

This section provides basic troubleshooting steps for common issues encountered with the IC693CPU374 module.

Symptom	Possible Cause	Action
CPU FAULT LED is ON	Program error, hardware fault, or memory issue.	Check programming software for diagnostic messages. Verify module seating and connections. Cycle power.
CPU not entering RUN mode	No program loaded, program error, or mode switch in STOP/PROGRAM.	Ensure a valid program is downloaded. Check for program errors. Verify mode switch position.
No communication with programming software	Incorrect cable, port settings, or software configuration.	Verify communication cable integrity. Check serial/Ethernet settings in software and on CPU.
I/O modules not responding	Incorrect I/O configuration, faulty module, or backplane issue.	Verify I/O module addresses and configuration in the program. Check I/O module status LEDs.

For advanced diagnostics and error code interpretations, refer to the GE Fanuc Series 90-30 PLC Troubleshooting Manual.

6. Technical Specifications

Key technical specifications for the GE Fanuc IC693CPU374 module:

- **Manufacturer:** GE FANUC
- **Model Number:** IC693CPU374
- **Processor Speed:** 133 MHz
- **I/O Points:** 2048
- **Register Memory:** 240 KBytes Total
- **Floating Point Math:** Yes
- **System Architecture:** 32 (64) BIT System
- **Processor Count:** 1
- **Processor Core Count:** 1

7. Warranty and Support

Warranty information for the GE Fanuc IC693CPU374 module is typically provided at the point of purchase

or can be obtained directly from GE Fanuc or an authorized distributor. Please retain your proof of purchase for warranty claims.

For technical support, product documentation, or service inquiries, please contact your authorized GE Fanuc representative or visit the official GE Fanuc support website. When contacting support, have your module's model number (IC693CPU374) and any relevant error codes or symptoms readily available.